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LECTURES BY M. DE BLAINVILLE ON COMPARATIVE OSTEOLOGY.

THE

COMPARATIVE OSTEOGRAPHY

OF THE

SKELETON AND DENTAR SYSTEM

IN THE FIVE CLASSES OF

VERTEBRAL ANIMALS,

RECENT AND FOSSIL.

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WITH GRAPHIC DELINEATIONS BY M. WERNER;

EDITED (FROM THE FRENCH) AND

ADDITIONALLY ILLUSTRATED

WITH NUMEROUS NOTES, OBSERVATIONS,

AND DRAWINGS,

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THUS, the authors of this memoir conclude, that the fossil in question indicates the existence of a species of gigantic Ape, living with the Pachydermata on the lower range of the Himalayas; but, is it quite certain that this jaw belonged to an Ape? Now this appears to me by no means certain: first, in comparing it with the *P. Maurus*, it is impossible to trace the least resemblance. Its relations to the Macaque, and more especially to the Baboon, seem more in point; but then the teeth, and more especially the canine, admit of no comparison, unless we admit—which is extremely improbable—that the dentar system of this jaw, is a mixture of the four first teeth of youth, and of the two last of the adult; an arrangement which is met with oftener in other Mammals than in the Apes. What adds to my doubts, is the form of the chanfrein or face; which points at a terminal nasal opening, quite otherwise arranged than in the Simiæ; and if the figure be a faithful representation, the advanced position and the size of the infra-orbitar foramen, are opposed to the opinions of the English observers; and finally, the complicated form of the corona of the two last molars.

The more important fragment of those discovered by Messrs. Falconer and Cautley, consists in a lower jaw whose right branch (*right side of the body*) is nearly complete with all the molar teeth, and the left is broken towards the *principal molar*. Its length has been estimated at five inches three-tenths English; for the fragment is only three inches and six-tenths. It is figured in the "Journ. As. Soc. Beng.," vol. vi., pl. 23, fig. 1, May, 1827; unfortunately the figure is far from distinct.

On its more complete side, the fossil wants the condyloid and coronoid processes; the angle even has been in part broken off, but the masseteric fossa is well marked. The two middle incisive teeth are in their place, likewise the left canine broken in its upper third. The right canine and lateral incisives are wanting. The left molars are destroyed to the level of the alveolar edge. The right molars are still present, but so worn, that the corona presents merely a hollow disc, surrounded by a circle of enamel. The last molar is less worn, but yet presents no trace of points or tubercles.

On comparing this jaw with that of the *Pithecus Entellus*, it is found to resemble it much in its form and its general proportions; what remains of the canine tooth has precisely the same form and dimensions. Nevertheless, the symphisis is proportionally much higher than the body of the jaw itself; the chin was much more compressed laterally under the second molar; and the first of these teeth was more elongated and projecting than in the *Entellus*: peculiarities indicating an aged male specimen.

This fragment, which belonged to a specimen larger than the Entellus, in the proportion of 5, 3 to 4, was black, ferruginous, and contained in a matrix of sand-stone (gres).

Another fossil fragment, found by these gentlemen in the same locality, was the right half of a lower jaw still containing four molar teeth: it is figured *loc. cit.*, fig. 5. In estimating the total length of the jaw by the fragment, it ought to have been about four

inches in length, that is, considerably smaller than the preceding.

Of the four teeth present, the backmost has its points slightly blunted; those of the anterior almost effaced: the heel of this tooth, viz., the posterior, is bifid internally as in the Macaques, instead of being simple and flattened as in the Entellus. Moreover, the body of the jaw is deeper, though not so strong, and sharper at the base than in the Macacus. Not so deep as in the Entellus, but yet belonging to an animal much larger than that Simia.

A third fragment of the same side of the lower jaw, but containing only a single molar tooth, confirms what the second fragment had shown; viz., the existence in a fossil state of a species of Ape approaching the Entellus, and at least of the same height.

Messrs. Falconer and Cautley have also referred to the Simiæ. 1. An astragalus which they consider, both as to form and dimensions, as identical with its analogous bone in the Entellus. 2. Left upper canine tooth of large dimensions, since, although broken near the commencement of the fang, it still measured one inch and nine lines in length, with the diameter of three lines at its base. These gentlemen remark, that this diameter is much larger than the canine of the Orang-Outan of Sumatra, described by Clark-Abel, and which was seven English feet high; and they describe and draw this tooth ("Journ. As. Soc. Beng.," vol. vi., pl. 18, A, B, C,) as having two very smooth surfaces, one anterior the other posterior, which they suppose to have been caused by the rubbing of the lower canine and even of the first molar, which is a thing extremely difficult to be understood. The editor of the Journal accordingly, in publishing the note of Messrs. Falconer and Cautley, has made this remark,—"that if one of the smooth surfaces of this tooth had been really formed by the action of another tooth, as well as a third facette at the extremity, it was not so of that described as the anterior; and that, in fact, on examining the surface with a glass, there might be seen lines or striæ showing the action of a file or rasp;" and as these fossil teeth form a part, at times, of the Indian pharmacopœia, he thinks "that the form of this tooth is too artificial to be referred, with any thing like certainty, to an Ape, or to any other Mammal!"

It appears then, that if there be any certainty that there exist in the lower Himalayas, fossil remains of a species of Ape, much resembling, if it really differ from the Entellus and *P. Rhesus*, which are still found abundantly alive in these countries, it is not absolutely the same; for the first jaw, supposed to be that of the Cynocephalus, by Messrs. Baker and Durand, and still less for the tooth of large dimensions indicating an Ape seven feet high. Moreover, these fossils are found associated with those of animals probably extinct. The Anoplotherium posteriogenium, Camels, Antelopes, and, amongst others, the Sivatherium with four horns; of the *Megalochelys siralensis*, an enormous land tortoise; and likewise with animals still alive—the *Crocodilus biporcatus* and *Gangeticus*.

I ought also to remark,—being unfortunately unable to give more circumstantial details,—that a Swedish naturalist, a Mr. Lund, who for five or six years has been exploring the Brazils, has discovered, between the rivers Rio das Velhas—a tributary of the Rio San-Francesco—and Rio Paraopeba, numerous caverns with fossil remains, hollowed out in a secondary limestone rock in horizontal strata. What interests us at the moment is, that Mr. Lund, in his letter transmitted to the Academy of Sciences, in the course of the present year, mentions having discovered amongst these fossils, which abound in the red earth covering the bottom of these caverns, fragments of more than seventy-three species of Mammals belonging to forty-three genera; and that in this number there are remains of *two species of the Primates*. One, a real Sajou, double the height of the existing species, and which he calls *Callithrix Primævus;* and the other of a height much larger than the tallest species of the Cebidæ, since it reaches four feet; and of which he has thought fit to form a particular genus, under the name of *Protopithecus*, but without mentioning the characters upon which he bases it!

The Museum received some time ago a very interesting package of fossil bones from these caverns; unfortunately none of them belonged to the Primates.

M. Lartet, as we have seen above, had imagined that one of the molar teeth found in the depôt at Sansans may have belonged to a Sapajou, or to a Primate of the new continent; but it is easy to show, by a careful comparison with the analogous tooth in the Alouates, for example, that the analogy drawn was erroneous.

It was still easier (in respect to the anterior half of the lower jaw having most of its teeth, or at least their roots, and which M. Lartet supposed to belong to a Maki), to prove that it did not. In fact, although the form of the end of this mandible does to a certain extent approach that of the Indris, the number of the incisives which certainly are six, and the strength of the canine, leave no longer any doubt; and finally, to allow every one to judge for himself, we shall afterwards give a drawing of this interesting fragment.

CONCLUSIONS.

In the actual state of our knowledge respecting the antiquity of the Primates on the surface of the globe, judging by the various traces which they have left, we may

venture to consider the following conclusions as pretty nearly certain:—

1. Several species of Apes are pointed out in the writings of the ancients, dating from Aristotle, that is, two thousand years ago, and these species are the same which still live in the countries in which the ancients saw them.

2. The most ancient works of art, without doubt anterior to literary works, confirm the same results; that is to say, the species which are found most commonly represented on the Egyptian monuments are those which are still brought into Egypt.

3. It is probable, therefore, that the same holds with regard to the mummies of Apes.

4. Fossil remains of the Primates have been found in different parts of the globe; Apes, or Pitheci, in the old continent; Sapajous, in the new, but no Lemurs or Makis.

5. Fossil remains of Apes have been found in countries where live species still exist in numbers; and others in Europe, where they are no longer found, excepting upon an extremely limited point (the rock of Gibraltar), and very probably in a fugitive state.

6. Fossil Sapajous have been found as yet only in those countries where live species still exist.

7. The fragments collected in India may have belonged to species which still exist.

8. Those found in Europe appear to belong to a peculiar species, distinct from those existing in India, and seemingly intermediate to the Gibbons and to the Semnopitheci, or to the Colobes of Africa.

9. Those observed in America belong, according to M. Lund, to new species, surpassing in size all the Sapajous known at the present day.

10. The fossil remains of Apes in India are found, *pell-mell*, with the fossil bones of animals considered as lost, and of others certainly still existing in that country.

11. Those of Europe are in the same position, both from what M. Lartet has observed, and from what I have myself seen.

12. Those of Brazil are also mingled up with the bones of ancient animals, although much less numerously than with the bones of animals which have become extinct. This, at least, is the opinion of M. Lund.

13. These Brazilian fossils are found in the diluvium of caverns.

14. Those of India and of Europe are in a middle tertiary fresh-water formation, and, consequently, belong to an epoch much older than the period of the last catastrophe, which is supposed to have given their present form to our seas and continents.

The very singular *impressions*, in respect to the regularity of their form and position, discovered a few years ago on the surface of some very ancient rocks in Germany, have been thought by some persons to indicate traces of the existence of Apes on the surface of the globe. This hypothesis is entirely devoid of every kind of probability; and thus, others have thought that they showed traces of the Didelphis, whilst others thought them to have been made by the Salamander; and, finally, none of these opinions being really maintainable, bolder naturalists attributed them to a distinct and unknown genus, which was much easier to do than to prove any of the opinions above stated. We shall return to the subject in the history of the Didelphis, because a greater number of Paleontologists think that the animal belonged to this subclass, but with no better reason than those who maintain seriously that they are the traces of Quadrumana, or of Salamanders.

OBSERVATIONS AND ADDITIONS.

Since the impression of that part of my work having reference to the Mosaic of Palestrine, I have learned that the royal library had purchased from the heirs of M. L. A. Millin, a portfolio of coloured drawings, the size of nature, representing this work of art, and which he had caused to be made under his own inspection when he travelled in Italy.

M. Jomard, who informed me of this, had the kindness to put the portfolio at my disposal, enabling me to rectify what I said at pages 44 and 46.

1. The small figure of the Ape, sitting on a rock, without a name at present, but which formerly had that of *Satyros* attached to it, p. 44, has a tail of some length; thus it cannot be a young Magot, as I supposed, but rather a young Papion (*Pithecus Cynocephalus*); its muzzle is, in fact, considerably prolonged.

2. The animal, whose figure is situated at the extremity of the third series, without a name but above that of Land Crocodile, is much less clearly represented than one might be led to suppose by the plates of Barberini, copied by Barthelemy; in fact, in the drawings of Millin, it has a short muzzle; the tail and the tarsi long; the mouth widely open, so much so, that the lower jaw rather resembles a collar; but, to be brief, it is very difficult to say what it is.

3. The Ape crouching at the right extremity of the second series, and which appears to look at the Onocentaure over its shoulder, has the muzzle longer than the figure of Barthelemy indicates; it is probably rather a young Papion than a young Magot, as I had at first supposed.

4. The *Choiropithecos*, which the plate of Barberini names *Chairopotamos*, is certainly a product of the artist's imagination.

5. The animal figured under the name of *Lynx* is, in fact, rather a *Felis* than anything else, by the form of its head and tarsi.

6. The *Keiron* is certainly an Ape, for it is represented placed on the elevated branch of a tree, and not hunting amongst thick

underwood, as I had been led to suppose from the plate of Barthelemy; and as he has the muzzle and the tail sometimes long, with a triangular-shaped tippet, or pelerine, of long hairs, the artist unquestionably meant it to represent the *P. Hamadryas*.

7. The *Sphynga*, represented in the figure of Barthelemy as without a tail, really has one. Like the preceding, it is placed on a tree, and having the muzzle sufficiently long, and the hairs long around the neck, it must also be the *P. Hamadryas*, or the Sphinx.

From these corrections, it appears that the Mosaic of Palestrine does not represent the Magot, which, in fact, belongs to no part of Egypt.

COURSE OF LECTURES

ON THE

PHYSIOLOGY AND PATHOLOGY OF THE BLOOD,

AND

THE OTHER ANIMAL FLUIDS,

DELIVERED IN THE SESSION OF 1839-40,

AT THE

School of Anatomy adjoining St. George's Hospital.

By HENRY ANCELL, Esq., Surgeon.

Lecture XXIV.

Illustrations of the action of remedies through the blood, by modifying its distribution, quantity, and quality. Effects of position in hæmorrhages, rheumatism, inflammations, fevers, &c. Abstraction of blood; its modus operandi, effects in hyperæmia, hæmatitis, and toxicohæmia. Principles of treatment in local diseases from poisoned blood. Diet and abstinence; their importance, beneficial and injurious effects. Diluents; their effects on the blood; indications for their employment. Materia medica; action of cathartics, emetics, diuretics, diaphoretics, sialagogues, balsams, alkalies, &c. on the blood; action of ammonia. Conclusion.

Gentlemen:—The blood being the material from which the structures are originally formed; by which the functions of life are maintained, and health preserved; by which, also, the whole or a part of the animal economy may suffer disease, or death;—a knowledge of its nature and habits, and of the laws which regulate its circulation, must be the only true foundation of *rational medicine*. The *art* of treating diseases must rest, almost entirely, upon our acquaintance with remedial agents, which produce their effects upon the system, or its parts, by modifying the quantity, the quality, and the distribution of the blood, and our skill in applying them; all else, even in the most judicious hands, being conjectural, and tending to reduce life or death to a mere *chance*. I will briefly mention a few of those principles of medical practice and medicines, which in their remedial action, may be referred, most unequivocally, to the blood.

Posture, and the Position of Parts.—One of the first and most important applications we are called upon, in practice, to make of our knowledge of the blood and of its circulation, relates to posture: the life of a patient may depend upon our judgment and promptitude of action in this respect. As regards hæmorrhages, this is well understood and generally acted upon; thus, when a patient falls into *syncope*, in which a loss of sense, thought, and voluntary motion results from diminished afflux of blood to the heart and brain, we instantly place him in a recumbent position; failing thus, persons in a state of anæmia, or debility, have been known to die from the loss of a very few ounces of blood. The loss of voluntary power, which causes the individual to fall to the ground in fainting, is the means by which this effect is spontaneously counteracted. I believe that death from uterine hæmorrhage will rarely occur, if the head be kept lower than the uterus; and every practitioner is aware, that when abortion is threatened by sudden hæmorrhage from the vagina, and when alarming hæmorrhage occurs from the rectum, the first step to be taken is a recumbent position. In all these cases we act upon well-known principles; we increase or diminish, as the case may be, the momentum of blood to the part, and the resistance to its return. In the case of syncope, we increase the quantity and velocity of the blood circulating in the heart and brain; in the case of uterine hæmorrhage, we diminish both, as regards the uterus. M. Piorry proved, experimentally, that hæmorrhage from arteries of moderate calibre may be arrested by simply elevating a bleeding limb.

But it would be a great oversight in practice if we were to limit the effects of posture to the treatment of hæmorrhages; there is, in fact, scarcely a disease in which it ought not to be considered. When acuteness of sensation, rapidity of thought, and activity of voluntary motion, are increased by increased momentum of blood to the brain, as in various forms of delirium, we obtain the greatest advantages by keeping the head elevated. Congestions in the pituitary membrane take place in the most dependent part. Pneumonia occurs in that portion of the lung situated most inferiorly in the chest. Many congestions and inflammations, for instance, orchitis, are greatly relieved, if not cured, by an elevated position of the part affected, as respects the rest of the body; fulness of vessels, swellings, redness, heat, and pain, are increased by every cause, local or general, which invites or propels more blood

to a part. Gout and erysipelas are increased by the depending posture; and these, as well as other inflammatory affections, may be aggravated or renewed by any cause which, according to the known laws of the circulation, impedes the flow of blood to the other parts of the body. Dropsical effusions are relieved or prevented by such a position as impedes the flow of blood to the part, and promotes its return to the heart. In acute articular rheumatism, the position of the affected limbs is a point of practice of the highest importance. Relief is frequently obtained very rapidly by raising the limb above the trunk; but this apparently simple proceeding must not be regarded in a partial point of view; for instance, it would not be right to raise the limbs in the early stage of the more acute attacks, when the blood is greatly inflamed, before blood-letting has been pretty fully adopted; for the simple reason, that by such a proceeding, the pericardium being placed lower than the parts first affected, we favour the translation of the rheumatism to that membrane. Practice has so convinced M. Piorry of the fact, that the more elevated the limbs are, the more rapid is the resolution, that about the third day, after one or two depletions, he raises them upon pillows a foot above the pelvis; and, as we should expect, a moderate degree of elevation of the knee frequently succeeds better than one more raised of the feet and ankles. As a general rule also, the patient should lie on the side of the body opposite to that affected. Again, it is a good practical rule, not to allow anemic and debilitated subjects to remain with their heads upright, or in a standing or sitting position, immediately after taking nourishment, since a slight failure of the circulation in the brain may induce nausea and vomiting, and these may be followed by syncope, and even convulsions. It is frequently beneficial, in order to favour the circulation in the central organs, to elevate both superior and inferior extremities. I have seen this totally disregarded with respect to the hands and arms, in urgent cases. In fevers of bad character, again, the position of the patient is of the utmost importance. We know that congestions, but more particularly hypostatic pneumonias, are among the most fatal complications of these fevers. This is remarkably seen in the congestive typhus of our own climate. The power of the heart becomes depressed, and the sensibilities obtunded or perverted early in the disease; and on these accounts the patient should not be allowed to remain for a long time in the same position, particularly in a supine one. Whatever difficulties may attend the proceeding, he should be frequently moved, by which relief is afforded; and not only those external congestions and inflammations, followed by sloughing over the sacrum and trochanters, but those internal congestions and inflammations also, resulting in inevitable death, may be prevented. These are points of practice founded on demonstrable physical laws of universal application in the living body, yet, I believe, too little regarded in the treatment of diseases, because the slightest importance only is attached to the blood itself.

I purposely pass over all further consideration of the wide subjects of excessive and defective determinations of blood to particular parts, so fully exemplified and explained in Dr. Parry's "Elements of Pathology," and with them the principles of derivation and revul-ion, among the oldest and best-established in the practice of physic.

Abstraction of Blood.—The rapid withdrawal of blood from a large vessel is the most powerful method of depletion which we possess. By this measure we directly reduce the quantity of fluid contained in the system, producing all the effects of diminished pressure, for which purpose bleeding is frequently resorted to in the treatment of general and local *hyperæmiæ*. But although when the system is suffering from an excess of blood, its abstraction would appear to be a simple and unquestionable proceeding, yet judgment in adopting it is required. In recent and slight cases hygienic remedies are preferable, and should be resorted to in the first instance. It is when these more simple means of restoring the balance fail; when moderate diet and exercise seem to increase rather than diminish a plethoric state; when certain predispositions to local affections, as apoplexy or thoracic diseases, exist; where there is an aneurism, and when local attacks are immediately threatened, or have actually supervened, that a diminution of the mass of the blood is indicated; in quantities to be regulated by the urgency of the symptoms, and the effects produced on the circulation, as measured by the pulse. But it has been made a question, whether bleeding should be employed as a curative or only as a palliative measure in general hyperæmia. There being an excess of blood, and the power of the heart and blood-vessels being undiminished, by taking from the mass, the resistance throughout, the circulating system is lessened, and accordingly the pulse rises. The vessels having been preternaturally distended, their action is restored with the motion of the blood, relief is usually obtained even during the operation, respiration is facilitated, the secretions are promoted, and strength is given to the whole frame, which was previously oppressed. M. Piorry refers to 88 cases in which cures were obtained in a few days by carrying the remedy sufficiently far; and every practitioner, especially in country districts, must be aware of the permanent relief afforded by copious bleeding in well-marked cases. Where bleeding does not produce the usual curative effect, I should say there must be some morbid quality

complicating the state of general hyperæmia.

Bleeding for symptoms of general hyperæmia should be abstained from, if possible, when epidemics prevail in which this measure is contra-indicated, in scarlatina, measles, and typhus. In individual cases, also, in which there is reason to suspect the existence of an eruptive disease, where, together with fever, there are the most marked symptoms of general hyperæmia, we are called upon to wait until the usual period of the eruption. By deviating from this principle, we are liable to interrupt those changes which take place in the blood at the period in question, and which are essentially necessary for the restoration of its healthy state. The only justification for deviating from this rule, is the threatened disorganisation of some vital organ. There are many other states of the economy, as, for instance, in the female at the approach of menstruation, to which the same observation applies.

But besides the effect of diminishing mass and pressure, abstraction of blood is soon followed by dilution of that which remains in the vessels, for bleeding promotes absorption, and the proportions of fibrine and red corpuscles are diminished, while the water, and probably the salts, are increased (Table XVII.); hence bleeding is a sheet anchor in *hæmatitis*. The molecular vital actions, in other words the stimulating qualities of the blood, are diminished by this means; thus, the sudden abstraction of two pounds of blood in its most inflammatory state, *suddenly* checks those molecular actions, and with that check we have a reduction of animal heat, a retardation of the velocity of the blood's current, a softening and compressibility of the pulse, and a cessation of those local inflammations and effusions which are the consequences of an inflammatory state of the blood. By lessening the quantity and diluting the blood, the augmented force of propulsion of the heart and the action of the vessels, viewed as the combined effect of their elasticity and tone, are diminished. Bleeding, therefore, and particularly full bleeding in a free stream, is one of the most powerful remedies for an inflammation of the blood; but it has ever to be remembered that a continuation of the buffy coat is not always a reason for repeating the bleeding, since the actions in the blood, which constitute hæmatitis, are in a great measure independent of mass, and may occur in a true state of hydrohæmia. Bleeding, abstinence, dilution, and repose, all of which modify the blood, constitute the most important part of the treatment of acute inflammatory maladies.

So many diseases depending upon a poisoned state of the blood, one of the most important practical questions which comes before us, relates to bleeding in *toxicohæmia*. We might infer, that when the mass of blood is poisoned, it must be advantageous to withdraw a portion from the system; but here again we have to apply the important fact, that bleeding promotes absorption. So long as the *materies morbi* remain in approximation with the living tissues, bleeding is not only useless but dangerous on this account, for the quantity of poison is increased in the blood remaining in the system, and all its effects aggravated. Again, bleeding is contra-indicated, when abundant evacuations, producing a state of anæmia, are the consequences of the poison, and when there are very marked symptoms of general debility. On the contrary, in toxicohæmia, whether produced by poisons taken into the stomach, by marsh or human effluvia, or by the absorption of any of the excretions, when there is general hyperæmia, more particularly if this coincide with congestion of the brain, the lungs, or the kidneys, or with inflammation threatened or present of the blood, or of any of the more important organs, the general or local abstraction of blood is indicated. Even in this case it is of the highest importance to ascertain whether the affected individual continue to be subject to the influence of the poison. If it be an intermittent, does he continue to inhale the marsh miasmata? If it be typhus, is he removed from the infected atmosphere, or has that atmosphere been sufficiently purified, and has every putrid secretion or exhalation been removed or neutralised? If not, however advantageous it may be to remove the congestions and obstruction of organs, blood-letting will do harm, since for every ounce of blood extracted, a fresh dose of poison will be received into the system.

When called to a patient, and from the history of the case and the symptoms present we are assured he is labouring under some disease which consists in a poisoned state of the blood, our earliest and one of our most important cares is to ascertain that all the vital organs are performing their functions regularly. For nature, in recovering the normal constitution of the blood within the vessels, eliminating that which is vitiated from the system, or renewing the general mass, of which processes all may be necessary for a restoration to health, can only operate by the organs; and the resources of art by which we act directly upon the blood, are at present extremely limited in their curative effects. As different medicinal substances are separated by different organs, and in the course of their separation may irritate, inflame, or cause the congestion of the part, so do the poisons producing diseases express their effects on the organs. Thus, in the typhus of our own climate, and in some constitutions of the atmosphere rather than others, we find a great tendency to congestion of the lungs; this is frequently the first untoward circumstance which occurs. It may be, that for the elimination of a particular poison from the blood, the lungs are the

proper organs, and they become inflamed and disorganised in the progress of the work; but whether so or not, undoubtedly the blood can neither be renewed nor properly purified; probably bad blood cannot be completely eliminated, without the lungs performing their due share in the process. Thus we are called upon throughout a typhus fever, as well as at the onset, to watch the function of the lungs vigilantly, and to rectify, if possible, the very earliest interruption that it may suffer, and so of every other organ. If this be the true method of viewing this subject, it harmonises well with many of the practical precepts long since established in this country, respecting general and local depletions in these diseases. It may fairly be called a *principle* of medicine; but at the same time it must be obvious to every reflecting mind, that, on adopting it, we render our remedial treatment, as directed to different localities, subservient to the one great principle—that of blood-making and blood-preserving, which, in very many cases, and to a very considerable extent, must modify at the bedside, the application of the precepts just referred to, inducing us to shape our local measures in each particular case, according to the knowledge we may acquire, from day to day, of the varying states of the blood.

Diet and Abstinence.—This is, perhaps, the most practical of any subject which comes before us; it is one of our most powerful means of treatment—frequently the only one of correcting a bad state of health—a remedy dictated by nature, the direction of which requires as much skill as that of any active medicine. The kind of diet which a patient is permitted to take in reference to the state of the blood, may be a question of life or death. In plethoric habits, with an acrimony of the humours, a high animal temperature, and a consequent tendency to inflammatory attacks, a vegetable diet is to be preferred, as in the gouty, many cases of rheumatism, and cutaneous affections, and in many diseases of children. Milk diet, if rigidly enforced, may prevent affections of the digestive and sanguiferous organs running on to an incurable extent. In our hospitals, feeble and debilitated subjects recover their health immediately under an animal diet. More has been done in scrofula and diabetes by diet than in any other way. Rigorous abstinence is the most powerful means after bleeding of lessening the quantity and the richness of the blood in the system. The depletion of the vessels by abstinence is but slight during the first few days, because the various fluids and tissues, with the air respired, furnish materials by which the waste of blood is supplied; but even at this time the qualities of the blood are altered, and in particular, according to Collard, the proportion of fibrin to that of albumen is diminished. After this period phenomena occur, analogous to those which result from hæmorrhage; there is paleness of the lips, tongue, and conjunctiva, flatness of the veins, the circulation being generally slower, diminished action of the heart and arteries, diminished size of the heart, the chest returns a clearer sound, and, ultimately, there is extreme debility, with disinclination to motion, slowness, and torpor of all the functions, and tendency to syncope in an erect position. These symptoms result from affections of the alimentary canal which obstruct absorption, from inordinate evacuations, and from prolonged abstinence; and the latter, if maintained rigorously for about fourteen days, renders the muscles of the extremities extremely flaccid, wasted, and weak; their constituent principles, as well as those of the fat, and, ultimately, of the denser tissues of the body, are reabsorbed into the blood, to repair the loss which it necessarily sustains; extremely low diet, short of abstinence, will destroy an animal in twenty-five or thirty days. Thus we see that rigorous abstinence is pretty much the same thing as copious blood-letting; and that in the treatment of disease through the blood, abstinence for good or for ill is one of the most powerful, although a negative agent.

The effects of abstinence are, however, slower than blood-letting, and, if carried out for a moderate time only, it is free from the dangers of the latter. A diminution of nourishment, either as regards quantity or quality, is the first remedy we resort to in general hyperæmia, by which we may limit and controul the process of blood-making; and, although a patient is much more debilitated from three or four days' rigorous abstinence than from moderate loss of blood, yet, by its gradual operation, it is much better calculated to restore the system to a just balance, and to prevent the return of the hyperæmia. In hæmatitis, again, a rigorous abstinence is one of our first indications; and here it is easily carried into effect, since nature herself dictates it. After the continuance of an inflamed state of blood for five or six days, and sooner, if the disease should subside, the want of nourishment begins to be felt, and a milk or a light diet may be allowed. If, after a copious bleeding, perhaps repeated, and several days' abstinence, the blood should remain buffy, and the pulse continue quick, without any local complication, light nourishment is indicated. The ordinary *practice* is to allow it; and this is justified in *theory*, the morbid blood requires to be replaced by new blood, or to be repaired with new materials; and to effect this, chyle must be formed, which presupposes the administration of food. In almost all fevers there is a period when it is required to act upon this principle, and, although in judicious hands the most violent diseases have, without doubt, been checked, and

even cured, by the proper management of diet, yet an exaggerated and ill-regulated abstinence is as dangerous as any other remedy; I have no doubt that many a life has been lost by carrying it too far, perhaps quite as many as from the opposite error.

Abstinence has been employed as a powerful remedy by promoting intestinal absorption in effusions, congestions, excessive corpulency, and inflammatory depositions. It has been resorted to also in the treatment of cancer, it is said by several authorities, by carrying it to an extreme, with the greatest success; but, unfortunately, morbid growths, as it appears to me, are, generally speaking, the last to be absorbed; it comprises, in great part, the well-known method of Valsalva for the cure of aneurism. *Cura famis*, or a limitation to a few ounces of nourishment daily, has proved successful in syphilis, and in various chronic diseases, particularly in the hands of Rust, who cites a case of obstinate chorea cured in this manner.

Diluents.—These are calculated to increase the fluidity of the humours, and especially of the blood and lymph. By this effect they facilitate absorption, circulation, and exhalation. They have a tendency to augment the pressure by increasing the mass of fluids, but they lower the power of the heart by diluting and weakening the blood. Further, since water, although pure when absorbed, rarely if ever passes out of the body without carrying with it saline and soluble animal matters; it is calculated to diminish the irritation or excitement which these occasion in the system, not only by dilution, but also by abstraction. That the blood may be thicker and richer than natural has been demonstrated, just as the bile and urine vary in their qualities, and may be charged with excess of animal matter; in such cases to dilute the blood, and through it the other animal fluids, is a remedy of great power and of unquestionable advantage. It is not to be said, that water is assimilated by the blood in proportion as it is absorbed, since it is eliminated by the organs with almost equal rapidity; hence the degree in which the blood becomes diluted, must depend in a great measure upon the state of the latter. The rapidity with which it traverses the kidneys, skin, and lungs, led physiologists to deny that it could pass through the absorbent, circulating, and exhalent systems, and to seek for more direct passages; but our improved knowledge of the circulation of the blood has rendered all this quite intelligible. Notwithstanding this rapidity of exhalation, it appears, by the experiments of Schultz, that by the continued use of watery drinks, we have the power of rendering the blood permanently more dilute to the extent of 8 or 9 per cent., and this must produce universal effects throughout the economy. Neither is the utility of diluents limited to the correction of the *plasticity* and the *acrimony* of the humours, but they cool the blood if employed at a proper temperature, and they lubricate or soften the dryness, density, or harshness, of the tissues.

Thirst is the best indication for the employment of diluents in diseases. The thirst which succeeds to hæmorrhage, particularly if the latter be copious, indicates the activity and promptitude with which nature calls into requisition all her powers to maintain the healthy condition of the blood. Her first care seems to be, that a sufficient quantity of fluid should circulate in the vessels for the supply of the organs; but it has to be remembered, that the *blood* lost cannot be restored by this means. Fluid is absorbed the more rapidly in proportion to the emptiness of the vessels, excepting in the case where the circulation is so depressed, that the blood scarcely traverses the capillaries, by which absorption may be in a great measure arrested. In the treatment of anæmia and severe hæmorrhage, it would be futile to depend on dilution alone; the fluid should be slightly nutrient, consisting of diluted milk, or containing a small quantity of animal jelly, or of the animal extractive *osmazome*, as, for instance, weak beef-tea or veal-broth. This also applies to the early period of convalescence after severe depletion.

In hæmatitis, dilution is one of the most important therapeutical agents. Physicians of all ages, and of every school, have adopted it in the treatment of inflammations and fevers. Given in large quantities daily, but in small quantities at a time, its beneficial effects are established theoretically and practically. By diluting the liquor sanguinis we check the formation of fibrine; and the utility of the measure in this respect is exemplified in pneumonia, acute rheumatism, and croup; but when we lay it down as an indication to dilute the blood, it is necessary to allow only such quantities of fluid at a time as will be likely to be absorbed. If taken too copiously they are liable to accumulate in the stomach, and uneasy sensations and injurious effects may result; for there is such a thing as indigestion of liquids as well as of solids.

In toxicohæmia, however induced, the proper employment of diluents again is of the first importance. When poisons have been received into the stomach and absorbed into the blood, immediate and repeated dilution is indicated as a general principle; but discrimination in the employment of it is required. If a poison be of a soluble nature, and a portion should remain in the stomach, we promote its absorption by allowing watery drinks. M. Piorry recommends, in such a case, that the blood should be kept diluted by means of aqueous enemata and pulmonary inhala-

tion, at the same time employing the usual means to evacuate or neutralise the poison. When we have a poisoned state of blood alone to deal with, we attenuate the liquor sanguinis, lessen the intensity of the action of the poison on the organs, and promote its evacuation with the secretions by dilution; and these considerations apply in the treatment of poisoned states of blood from miasmata, contagions, and other causes, as, for instance, in the case of fevers, when the sensation of thirst dictates it. Dilution is the appropriate remedy for that state of blood which occurs in jaundice, considered apart from its organic cause. It promotes the evacuation of the colouring and other principles of bile contained in the blood, with the secretions; the diluents for this purpose should be rendered slightly alkaline by means of *sodæ carbonas, &c.*; and they may be promoted in their action by aqueous enemata, warm baths, and the inhalation of watery vapour. Similar considerations apply when deleterious substances have been spontaneously developed in the tissues, and absorbed into the blood. Diluents are indicated theoretically and practically in the typhoid state. If putrid matters have been absorbed into the blood, dilution is one of the most efficient means of carrying them out of the economy; if it be that the general mass of the blood is damaged, dilution contributes to its renewal. Diaphoretics and diuretics for the most part, produce their beneficial effects upon the principles above developed.

I have selected these matters for the purpose of illustrating the effects of remedies upon the system through the blood, because they are of almost universal application; their modus operandi is in some measure known, and they serve in a manner to test our principles of medical practice. But let us now direct our attention to the *Materia Medica*, properly so called, taking a few substances promiscuously, and at this point we shall terminate the present course of lectures. In the old "Manchester Memoirs" there is a paper well worth perusal, by the late Dr. Perceval, on the action of medicines upon the blood. That paper contains facts which for years were entirely lost sight of. The works of Haller and of Hunter contain facts relating to the blood which have received the go-bye. A theory of medicine was adopted which did not include those facts. Was it that they are false facts? No. New investigations have established and extended them. The theory was essentially defective, and is now rotten. The whole tenor of these lectures serves to establish that medicines are received into the circulating blood; that they affect not only the general mass of the blood, but the chyle, the lymph, and the secretions. They produce changes in their qualities, or superadd new ones; or they act as antidotes to the morbific matter with which the animal fluids may be imbued, or the animal matters with which they may be surcharged. The more stationary elements of disease can only be reached by remedial agents, through the circulating fluids. Negative facts which might be adduced against this doctrine avail nothing. Dr. Perceval gives the best illustration of the truth of this position which I have met with. Butter is often impregnated with the taste and smell of certain vegetables in which cows have pastured, although the milk of the animal has no disagreeable odour or flavour. Now in the formation of butter there is, first, a spontaneous separation of cream; and, secondly, a fermentation of it. Here is a twofold and successive new arrangement of elementary molecules; the result of which is the recovery of the substances taken into the alimentary canal, with their original sensible qualities. Now, if the sensible qualities of such substances are lost in the chyle, the blood, and the secretions, the chemical properties, which are but other sensible forms, may be obscured; and in the present imperfect state of science, we cannot wonder that we frequently fail to detect medicinal principles in these complicated fluids. Purgatives and emetics injected into the veins produce purging and vomiting; those molecules in which their active forces reside, are conveyed with the blood into the minutest ramusculi of the intricate vascular network of the alimentary canal, and they excite the powers of expulsory motion. They are molecules inimical to the constitution of the blood, or to the more remote parts of the animal economy; hence, when received into the stomach, they are rapidly and, as it were, indignantly expelled, probably, in every instance, in consequence of imbibition or absorption into the blood. Nature, true to herself, rids the economy of there antagonistic powers, or strives to do so, in the same way, when by violence we mix them with the vital fluid. Take the *balsams*; Dr. Perceval mentions a patient to whom he administered six grains of balsam of tolu three times a-day, and his urine became strongly scented. The milk of a nurse is very readily imbued with garlick; and the latter affects the breath, although only applied to the wrist. Take *turpentine* and *copaiba*; the latter gives a slightly violet odour to the urine, and, according to Perceval, a bitter taste. Mr. H. B. Lane also ascertained that it produces albuminuria. A patient had taken large doses of copaiba for a fortnight, at which time the urine was albuminous: thirty-six hours after the last dose none could be detected, and a similar effect was observed in several cases. *Sulphur*, whether externally or internally employed, cures the itch. There can be no doubt that it undergoes some change or combination when taken into the stomach, and that it does not circu-

late in the blood in the form or with the properties of sulphur: yet when arrived at the surface, it evidently recovers those properties, communicating its odour to the perspiration, tinging silver, and curing cutaneous disorders. The effects of *rhubarb* and *logwood* in giving colour to the urine are obvious; the former sometimes tinges the perspiration yellow. *Nitrate of potassa*, *iodine*, and various other salts, and odorous and colouring principles, pass off with the urine. *Camphor* passes off by the lungs, and has also been found in the blood of the fœtus. These facts leaving no doubt on the mind that all which is active in a medicine, in reference to the functions of life, is received into the blood; the question then arises, how do active principles thus received into the economy produce their effects? The reply to a certain extent may be collected by reference to TABLE XXIII. Mechanical, chemical, and vital effects are produced on the blood. Sedative, stimulant, expectorant, diuretic, diaphoretic, sialagogue or purgative effects are produced on the organs. With respect to the most remarkable sialagogue, Dr. Colson separated it from the blood by allowing that fluid to flow from a vein upon plates of polished brass which became coated with mercury; and Dr. Christison detected mercury in the crassamentum of persons salivated, although none could be obtained from the serum.

There is no class of medicines which produces more decided effects upon the blood than *alkalies*; at the same time, when judiciously administered, there are few medicines which are followed by less injurious consequences, notwithstanding their great power. This is explained by their chemical properties, the readiness with which they form comparatively innocuous salts with all the acids, and chemical compounds with animal substances: they have been regarded as the proper solvents of animal matter in general, since coagulated albumen, fibrine, fat, cerebrine, are dissolved by them out of the body; and they also reduce skin, mucous membrane, and other animal matters, to a pulpy mass. When taken into the stomach in a concentrated form, or applied to other tissues, they excite those conservative processes by which their absorption is checked or prevented; in more dilute forms they are neutralised and modified by the acid and animal secretions contained in the alimentary canal, perhaps they are rarely received into the blood in their simple forms. Nevertheless, alkalies, or their looser combinations with the milder acids and animal substances, convert acid into alkaline urine; soap in large doses has this effect; and their agency is by the blood upon the whole economy, as shown by the tendency which their long-continued use gives to the phosphatic diathesis. When alkalies are absorbed slowly, molecule by molecule, they are again eliminated by the organs, unless taken in inordinate quantities, or for an undue length of time, or that the necessary balance between absorption and elimination is lost, in which cases we have their deleterious effects. When, also, the blood is kept continually under their influence by successive absorptions and eliminations, they, unquestionably, produce the effects described in TABLES XIII. and XXIII. Carbonate of soda, injudiciously persevered in, or prescribed in constitutions unfitted for its use, has modified the liquor sanguinis, more especially in reference to its coagulability, and has produced infiltration of the tissues, particularly of the lungs, with pneumonia. *Ammonia*, again, is one of the most powerful of all substances in its action upon the blood; added in minute portions to extravasated blood before the latter loses its vitality (TABLE XIII., 49), it hastens coagulation. This corresponds with its stimulating properties in the living system; in larger portions it destroys the vitality of the blood and prevents coagulation (*idem*). Injected into the veins it produces analogous effects on the blood, and the most dreadful consequences throughout the economy ensue (TABLE XXIII., 23). Taken into the stomach, or otherwise applied to the animal tissues, it acts as a powerful stimulant, which is but the combined result of those actions set up by the living tissues to prevent its absorption, or to eject it from the economy; hence in some cases, as the most powerful, it is one of the best of stimulants. But suppose, notwithstanding the barriers of life, it should still be absorbed into the blood? Why then, if in very minute portions, it still acts as a stimulant to the blood and to the organs, in consequence of which it is got rid of; but if in larger portions, or if its absorption be continued, it acts as a most powerful poison. Where is the proof? In the pages of Dr. Huxham and other observers, and in my own experience. Dr. Huxham records the case of a gentleman who habituated himself to the use of carbonate of ammonia, so that he would at length eat it in a very remarkable manner, as other people eat sweatmeats; he brought on fever, profuse hæmorrhage from the intestines, nose, and gums; every one of his teeth dropped out, he wasted, his muscles became as soft and flabby as those of a newborn infant; he broke out all over his body in irritable pustules, which led him to tear his skin with his nails in a most shocking manner; his urine was always excessively high-coloured, turbid, and very fœtid; and, although he left off the habit, he died tallied, and in the highest degree of marasmus. Huxham compared these effects to those which result from the bite of a viper; he attributed them to the blood being dissolved; and he asserted, I should say truly, that volatile alkali taken in excess, even by per-

sons in health, produces symptoms which indicate a beginning dissolution and putridity of the blood. Has all this any practical application? Yes, certainly. I happen to be in possession of the sentiments of two eminent practical men of two different schools, respecting the use of ammonia in low states of the constitution; one says it is the best medicine in the world; the other, that it is the worst; both as I believe attach very little importance to the blood in pathology and therapeutics. These discrepancies can only be reconciled by studying the effects of ammonia on the blood; in many cases as a stimulant it is a most valuable medicine; if absorbed into the blood in the low stage of some fevers, it is death. I believe that I have seen patients rapidly succumb under the free use of ammonia in such cases; and I should say, both from theory and observation, that to fulfil the indications then required, it is the worst stimulant that can be selected. The salts of ammonia appear to be peculiar in their action upon the blood; according to experiments made by M. Béniqué, the acetate in particular would seem to have a remarkable faculty of promoting its circulation in the minute capillaries; hence, in part, the utility of the *liquor ammoniæ acetatis* in obstructions, difficult menstruation, rheumatism, and in acute and inflammatory diseases, as sanctioned by the general experience of the profession.

In conclusion of the present course of lectures, I trust that I have fulfilled the main intention with which I set out, that of bringing into one focus the more important facts respecting the BLOOD in health and disease. It may be thought by some that the matter is deficient in practical application, but it is to be remembered how little we have been accustomed to consider the blood pathologically or therapeutically. I have endeavoured, under a few heads in the present lecture, to show that the subject is practically available, and I hope at some future period, with the permission of the Editor, to illustrate this more fully, in the widely-circulated pages of THE LANCET.

RESEARCHES
INTO THE
PATHOLOGY, PHYSICAL SIGNS,
AND
TREATMENT OF PERICARDITIS;
ILLUSTRATED BY CASES.

By THOMAS MOORE, *Secretary to the Dublin Medico-Chirurgical Society for* 1840-41.

[Read before the Dublin Medico-Chirurgical Society, during the Session 1838-9.]

In most of the cases hitherto detailed we have exemplified, in greater or less perfection, the symptoms usually described in books as attendant upon, and characteristic of, the onset and progress of this disease. Permit me now, Gentlemen, to occupy your time a few minutes longer, in mentioning a case wherein an attempt was made to counterfeit this complaint, not so much for the instruction it will impart, as to exhibit the schemes soldiers will sometimes resort to in order to avoid the punishment due to their faults.

A private in the 22nd regiment, having obtained furlough for three months, returned from the country, and remained in this city till the 15th July, the day of its expiration; by applying at the Town Major's Office, for an extension of a few days, he was granted five, to enable him to proceed to Chatham, where the depôt of his regiment was then stationed. Instead of availing himself properly of this indulgence, he remained in this place, disregarding future consequences, revelling in drunkenness and debauchery. Thus misspending his time, as soon as the period allowed had elapsed, he again made application, but received a severe reprimand, and was put under arrest.

That night, whilst in the guard-house, he alarmed his comrades by his frequent groanings, and occasional loud shrieks, complaining of his being on the point of suffocation, and in the greatest agony from pains in the chest; a report of his state was then made by the serjeant to the officer of the guard, who immediately ordered him off at an early hour in the morning to the Royal Infirmary. The next day he was seen by two or three persons connected with the hospital, and the following report taken down:—Extremely rapid and seemingly distressed breathing, amounting to 55 in the minute; distorted features, and considerable anxiety about the countenance; insatiable thirst; the history containing all the symptoms indicative of an attack of fever; his skin was moist and perspiring; the tongue clean and moist; all his pains were referred to the left side; the slightest attempt at drawing in a full breath produced inconceivable distress, and a few hours before he had had violent beating and palpitation of the heart; when the hand was placed over the cardiac region, and a slight degree of pressure made, he roared aloud, so that all the other patients imagined the person was guilty of great cruelty; the mere application of the stethoscope alone caused the same degree of suffering; the pains he described as being now here, now there, shooting up and down the side; from the rapidity of the breathing it was impossible to ascertain the state of the internal organs; his pulse, notwithstanding all his aches, examined several times, varied from 76 to 80, but never exceeded the latter; was full and compressible. He was ordered to be bled in the arm to 12 ounces.

Being deputed to bleed him, conjecturing,

from the character of the pulse and the circumstances connected with the history, that he was acting a knavish part, I was determined to treat him, as all melingerers should; accordingly, having got ready the lancet, and tied up the arm, there was an evident repugnance on his part to hold it out, uttering many objections and excuses; he several times refused to allow the vein to be punctured; at length, after much ado, having got the arm into a proper position, I made a large opening, the blood flowing out in a full stream to his great discomfiture: at the time that this was in performance his respirations also were accurately watched and counted; 12 ounces were taken, no amendment in his symptoms; 16 ounces, not the slightest; finds it quite impossible to draw in a full breath; the respirations vary from 50 to 55; but is grumbling exceedingly at this mode of treatment, saying, "it will do him no good;" in a few minutes more he had lost 20 ounces, but without relief; his breathing, however, is not so accelerated, having fallen to 40; he is also commencing to perspire about the face: as soon as 22 ounces were abstracted, he complained of weakness, sickness of the stomach, and an inclination to vomit, but still persisted in saying, "he was as bad as ever;" at last, after obtaining 24 ounces, and when on the point of fainting, he exclaimed, "Stop, Sir, stop, I'm better;" the respirations now did not exceed 24, and pressure to any amount might be made over the heart. The next day he had the same catalogue of complaints, being quite certain that bleeding would not be ordered, and quite determined to refuse should it be prescribed; a bolus of the most drastic purgatives was made up, which afforded but little rest during the remainder of that day and the entire night; the next morning he was informed that any further complaints on his part would not serve him in the least, as they would not be attended to, whereupon he demanded to be sent to his regiment, "where he would be treated far better than in a place in which he was one day almost bled to death, and the next had his guts purged out."

Although this treatment may appear very harsh to those unacquainted with such characters, yet it was the only one likely to subdue and overthrow his preconcerted plan; had a more lenient plan been pursued, instead of troubling the hospital for three or four days, he would have converted it into as many months, and, probably, would have deprived his regiment *in toto* of the services of an able-bodied and efficient soldier.

I shall now close this treatise by forming a comparison between the several cases contained in the foregoing pages:—

1. In the first of these, the disease we speak of was secondary to, and consequent upon, another, being of the most common form usually described, viz., rheumatic pericarditis; whilst in the others, we have every reason to think it was primary or purely idiopathic, originating in some external exciting cause.

2. The first, though greatly debilitated from a description of typhoid arthritis, was under our immediate observation, and had the disease treated almost at the very onset; whilst the others, possessed of constitutions, unravaged by previous diseases, were treated for their complaints, when at a very advanced period.

3. The one (Kennedy) was combined with pleuritic effusion; whilst in the others (the last case excepted) though the action was weak and irregular, yet the sounds retained their due proportion to each other, rendering life still more precarious, and our prognosis unfavourable; the others, uncomplicated, but without better expectations.

4. The pulse, in the first case, was full and regular; in the others, feeble, irregular, varying in strength and intermittent, there being in general a strict concurrence between the character of pulse at wrist and the action of heart, heard in precordial region.

5. The jugular veins in all four were distended from the obstruction afforded to the return of the blood, confined to or more remarkable on the left side; possessed of an undulatory motion in the two men, whilst in the little girl this did not appear to exist; whereas in the case lately seen, nothing could be more obvious, so much so, that the pulsatile motions appeared derivable from the expansion of the pulmonary texture by the entrance of air.

6. There was dulness with the other phenomena of pleuritic effusion in the left pleural cavity of one; whilst, in the others, an extraordinary clear, almost tympanitic, sound was observable: the respiration in the former being intensely bronchial; but in the latter, of that nature which may be defined non-terminal.

7. In the coppersmith's case, the supra-clavicular tumour extended much higher in the neck, was more prominent, and disappeared after the absorption of the effusion; in the last case it was equally prominent, the displaced or protruded lung mounting nearly to the same height, but remaining unchanged in its position; whilst, in the other two, the phenomenon was not quite so distinct, but sufficiently so to attract our attention, and continuing conspicuous till the death of the patients. Lastly, the first sound of the heart, in the coppersmith, appeared to have been affected like that in typhus fever described in Dr. Stokes' paper, with the morbid poison then prevalent in the system, manifesting, before and after the attack of pericarditis, that the muscular tissue must have participated in the general debility of the system. The conclusions, which may be inferred from the preceding cases and

their attendant phenomena, may be enumerated as follows:—

1. That the appearance of a tumour, extending from the left clavicle upwards into the neck; a tumefaction or puffy state of the integuments above this clavicle, contrasted with the right side, and attended with a clear sound on percussion; the existence of respiratory murmur, &c.; the elastic, sometimes downy, sometimes crepitating feel on pressure, with an increase on coughing, should induce us to suspect displacement or protrusion of the lung upwards.

2. That when these appearances and physical signs persist for a length of time, whether the symptoms have or have not subsided, the probability is, that adhesions have taken place between the pleura and surrounding parts; but the greater likelihood is, that, with the removal of the disease, the return of the displaced lung will take place.

3. That displacement of the lung upwards, forming a supra-clavicular tumour, was, and may be, a most valuable assistant in enabling us to determine the existence of pericarditis with effusion, when combined with pleuritic effusion on the left side.

4. That a full and puffy state of the lower portion of the left side, contrasted with the right, and attended with the phenomena recorded in the above description, may likewise materially assist us in detecting pericarditis, uncombined with pleuritic effusion.

5. That in uncomplicated pericardial effusion, there exists another curious, interesting, and valuable physical sign—explain it as you please—namely, the clear sound on percussion, in some cases confined to the posterior part of the left lung; but when the fluid is in enormous quantity, observable over the right; there still existing an evident difference between the sounds afforded by both sides.

6. That permanent, or occasional turgescence of the jugular veins, with or without an undulatory motion, is also an attendant phenomenon on this form of disease, and seems to depend on pressure of the lung against some of the large veins; the pulsations or retrograde motions of the blood appearing to be produced by and during the expansile impulses of the lung, inflated with air; retarding the onward flow of the current, and communicating to it a shock, as manifested by the undulation of the blood.

7. That all these, in connection with others, will assist in forming a group of signs, which will render the presence of fluid in the pericardium still more easily diagnosed, but little importance being attached to them when taken separately.

8. That in some cases of pericarditis, and in others unconnected with this disease, there is often present a peculiar "clicking sound," or the succession of a number of "clicks," the cause of which is at present inexplicable.

Lastly. That in many cases of pericarditis, we may often be enabled to infer its supervention, prior to any of the ordinary train of symptoms or physical signs having been developed, by observing the state of the pulse; and that this remark is more applicable to patients affected by rheumatic arthritis, whenever a regular intermission in the pulse occurs.

AN INQUIRY

INTO SOME OF THE

CONSEQUENCES AND CAUSES OF FAILURE

OF THE

NEW OPERATION FOR THE CURE OF STRABISMUS, OR SQUINTING.

By E. W. Duffin, *Surgeon.*

Much diversity of opinion certainly prevails in regard to the functions of the oblique muscles of the eye; but if we dissect them with very great care to their insertions, we must admit, whatever else we may call in question, that the direction of their fibres, as well as their ultimate attachments, warrant the conclusion, that the function of the superior oblique is to roll the eye inwards and downwards; and that that of the inferior is to rotate the organ in the opposite direction. When both muscles contract at the same time, the effect will be to bring the eye forwards, and render it a little more prominent; thence proceeds one of the common results, increased fulness of the eye, when the adductor is divided.

But in what manner the superior oblique can assist in rotating the globe *upwards* and inwards, as Sir Charles Bell, Dr. Franz, and others have imagined, I am at a loss to comprehend. Were it indubitable that Dr. F. divided the tendon of the superior oblique in his operation, the result he relates would, of course, be conclusive, that this muscle does by some means or other contribute to the performance of the movement in question.

The following case, an exceedingly instructive one, affords grounds for believing, that the only muscles requisite to enable the eyeball to move diagonally *upwards* and *inwards*, i.e., towards the nasal process of the frontal bone, are the superior rectus and the adductor; although it is possible that the superior oblique, by rolling the globe downwards and inwards, may contribute slightly, in some individuals, in causing the pupil to approximate the inner canthus, but certainly not in directing it upwards.

A man presented himself for operation who squinted in a most remarkable degree with the right eye, in the manner we have been discussing, viz., *upwards* and *inwards*; so much so, indeed, that when the eye was at

rest, fully a fourth part of the cornea was concealed from view. The gentlemen who examined this case previous to operation, viz., Dr. J. C. Williams, Mr. J. N. Thompson of Nottingham, and Messrs. Smith and Walker, surgeons, in the immediate neighbourhood of that town, were all convinced that either the superior or inferior oblique muscle was implicated in producing the deformity. From what I had experienced in similar cases, I was of opinion that the position of the eye proceeded from the conjoint operation of the superior rectus and adductor only; the former pulling the globe upwards, whilst it was unnaturally tethered or bound down by the latter. On dividing the tendon of the adductor, and completely liberating the eye from all confinement on its inner aspect, it immediately darted directly upwards, so that one-third of the cornea was concealed under the superior palpebra, and the pupil was restored to the natural central line, but of course much above its proper situation. In this position the eye remained fixed, unless the patient made an unusual effort to look downwards, which he could never so effectually accomplish as to make the axis of the two eyes correspond, and obviate double vision. On the third day after the first operation, I divided the tendon of the superior rectus by cutting down upon it anterior to where that of the superior oblique passes under it. This I did in the manner that I usually perform the operation on the adductor, by inserting a flat blunt hook underneath, and then snipping it across with a pair of scissors. The pupil immediately afterwards descended to its proper position in the centre of the orbit, vision became single, and the case went on satisfactorily in every respect afterwards.

I have met with numerous other instances of precisely the same description as regards the direction of the pupil upwards and inwards, but never, in any other case, found it necessary to divide any thing but the tendon of the adductor, and to liberate the eye from such abnormal connections, as I have described, as tended to confine its inner aspect. When, in the course of an operation, after cutting across the band of tendinous fibres by which the adductor muscle is inserted, the eye has been turned upwards and inwards, or, in the contrary direction, downwards, and towards the nasal canthus, I have always found some adventitious adhesion to be the sole cause of the movement; the contraction of the superior or inferior rectus not exceeding that which was natural to them, but productive of an irregular effect, because exerted on a tethered globe.

We have stated that one of the immediate effects of the operation is a trifling projection of the globe; the extent, however, to which this occurs, is very variable, and depends much, I conceive, upon the manner in which the division of the tendon has been accomplished.

When the operation has been performed without injuring the conjunctival and other coverings more than is absolutely essential, the increased prominence of the eye that results is scarcely appreciable, and, in some instances, cannot be at all detected. If, on the contrary, the eye has been liberated by submitting the sclerotic to a clean dissection, by means of the forceps and scissors, and the investing membranes have been removed to an unnecessary extent, the globe is much more liable to start forward, than when attention is paid to preserve the appendages and unoffending textures entire.

If, as frequently happens, the faulty eye is of somewhat less dimensions than its fellow, this mode of performing the operation merits perhaps a preference. But if, on the other hand, the faulty eye be the largest of the two, a circumstance of equally frequent occurrence, then it is of the utmost importance to perform the operation in such a manner, that all the natural attachments not concerned in the production of the deformity shall remain uninjured. This mode of proceeding, moreover, is in general too severe, and when no attention is paid to preserve the semilunar fold of the conjunctiva, destroys the natural beauty and finish of the nasal canthus, substituting, in its stead, a gaping cavity and a widened state of the inner angle, often so unsightly in appearance as to attract the notice of even a casual observer. When the circumstances of the case, then, lead us to select the operation by the forceps and scissors, care should be taken to preserve all those natural appendages of the eye on which its elegance and symmetry depend.

Another objection that I have found to proceed from removing more of the conjunctival covering than was essential, to admit of a perfect division of the structures which hold the eye bound in its unnatural position, is the protracted manner in which the work of restoration is afterwards carried on, and the difficulty of restraining the exuberant growth of the reparative granulations.

Indeed, this is such that they occasionally withstand the application of escharotics, and require to be removed with the forceps and scissors; a measure which, though productive of very trifling pain, always creates dissatisfaction. In a surgical point of view, perhaps, this may not be a matter of very great import; but children and nervous, timid persons are with difficulty persuaded to submit again to what has to them the appearance of a second or third operation. Another objection to this mode of operating, is the necessity of fixing the eyeball by means of a sharp hook passed through the tunica albuginea, which not only gives considerable pain, but, in refractory patients, is liable to lacerate the parts it pierces, and even to injure the

retina; but these are minor evils compared with the sloughing of the eyeball, and total loss of vision: an occurrence which I know has happened, when a clean dissection has been rather too extensively made of the sclerotic.

Under all these points of view, it appears to me a matter of great importance to separate or destroy the conjunctiva and membranous attachments as little as possible, and to confine the operation, when practicable, to a simple free slit through the conjunctiva, and subjacent coverings down to the tendon; and to separate this latter by means of a blunt hook passed underneath previous to cutting it across with a pair of scissors, inserted between the convexity of the hook and the sclerotic coat. I can produce abundant proof that the fullest benefit the operation can confer may be easily obtained by this mode of performing it, and that a week or ten days are in general sufficient for recovery, without any subsequent application of scissors or escharotics; and, as before observed, when thus performed, undue prominence of the eye will be a very rare consequence of the operation.

Another unfortunate result, but by no means the fault of the surgeon, is the undue influence which the external rectus occasionally exerts after the eye has been freed internally. For the most part, this effort does not continue beyond a few days, and never occurs at all if a slight obliquity remain in the other eye; should it do so, I propose hereafter to divide the abductor tendon of the left eye.

A very remarkable case of this description presented itself to my friend, Mr. J. N. Thompson, of Nottingham, which I had an opportunity of examining when in that town. A girl of 13 years of age, of an irritable, delicate habit, squinted inwards and downwards with the left eye. On dividing the tendon of the adductor, the pupil was instantly everted in an unusual manner; that of the right eye occupying its normal site, and vision became double. It was now found that, on looking at any object placed immediately before her, she had the power of directing the axis of both eyes correctly, so that no obliquity could be detected in either, and vision was single. If, however, without turning her head, she regarded an object placed a little at one side, the eye of that side was instantly everted to a very considerable extent; but when the object was placed on the left side the globe turned so completely round, that a considerable portion of the cornea was concealed in the outer angle of the orbit, the opposite pupil occupying its proper position. The most singular circumstance in this case is, that the external rectus of the sound eye should obey the same impulse, though in a somewhat less degree, as the eye which had been subjected to operation; but I think the fact is easily explained, and I shall attempt its solution when I have detailed another case, that happened in my own practice, of a similar nature.

A lady had the operation performed on the left eye, that in which the obliquity was the worst, and the vision most imperfect; the result was in every respect satisfactory. At the expiration of three weeks, as the defect in the right eye continued very marked, she was desirous of having the tendon in it divided likewise, having seen the double operation highly successful in a young person similarly situated, a short time previously; the tendon of the right eye was therefore divided; immediately, the external rectus of the *left* eye exerted an undue influence, and turned the pupil so much outwards that vision became double, and a very unpleasant leer supplied the original squint. It was afterwards found that she could direct both pupils with the utmost precision, when the object she looked at was placed *immediately before her*; but that if it were removed only a few inches to either side, if she continued to look at it without turning her head, the external rectus of the eye on the side to which the object was moved immediately exerted an undue ascendancy, and drew the pupil so much to the outer angle that vision instantly became double, and a most ungainly cast to that side supplanted the original evil. This untoward symptom has continued for some length of time; but as it is now confined to the left eye, and does not appear to be so marked as it was at first, I am in hopes that it will ultimately be overcome, when a reparation of the nerves, which maintain the sympathy between the eyes, is sufficiently established; still it is possible that in some instances this overaction of the abductor may become a permanent imperfection.

14, Langham-place, Sept. 10.

DIVISION OF

BOTH INTERNAL RECTI

IN

SQUINTING,

In preference to that of any other Muscle, when the Division of one Adductor only is not instantly and completely successful.

To the Editor of THE LANCET.

SIR:—You will oblige me by inserting the following remarks in the next Number of THE LANCET, on the subject of the division of the internal rectus in cases of strabismus convergens.

In three of the cases upon which I have performed the operation, the division of the tendon of the adductor muscle was not followed by any apparent immediate change in the position of the eye. In the first of

these, the eye that was operated on became straight on the following day, at the expense of its fellow which became inverted. In the other two, the eye still remains inverted, notwithstanding the complete division of its adductor tendon. Of this complete division there could be no doubt, since the power of abduction of the eye was much increased after the operation, when the opposite one was closed, as was seen by my colleagues, Dr. Atkinson and Dr. Elliot, who assisted me, and Mr. Fleming, Mr. Saul, Dr. Oliver, and Mr. Bowman, who were present. The unsatisfactory results of these cases (results so similar to those mentioned by MM. Guérin and Roux), led to the adoption on my part of a plan for the cure of similar cases, which I am happy to state succeeded perfectly on two patients upon whom I have since operated.

I drew the following inferences from the three preceding cases:—

1st. "*That the strabismus could not be regarded as confined to one eye*, since, when the *sound eye* was closed, *the affected one* became straight, and could move in any direction; but on raising the lid of the former, it was found *inverted*, though the position of the eyes was soon reversed again."

2ndly. "*That the straight position of the sound eye* appeared to me to depend on *the state of its optic nerve*, as vision was much more distinct with it when the squinting eye was closed, than *vice versâ*."

3rdly. "*That the convergence was mutual*, as was seen by the inversion of the sound eye, when (after closing it) the eyelid was quickly raised."

4thly. "That the return of the sound eye to the centre of the axis of the orbit must be the result of a muscular effort, *an effort* sufficient to overcome the contraction of *its undivided adductor, and made to accommodate* its more distinct vision."

The division of the superior or inferior rectus, or both, of the inverted eye, as recommended and practised by Mr. Liston, appeared to me to be an unsatisfactory step, because its position and motions were natural when the sound eye was closed; and its inversion evidently depended on *the state of its optic nerve* in relation to the nerve of the other eye, and not on any organic change of its muscles. A practical objection to its adoption in the cases in question, lies in the possible injury to the vitality of the cornea from the extent and direction of the incision of the conjunctiva, though I could conceive the necessity of such an operation in a case, for instance, where the division of both adductors had proved insufficient. The plan I determined upon, and which I fortunately soon had an opportunity of putting in practice in two cases, was *the division of the tendon of the adductor of the sound eye*, after the section of the other adductor failed in removing the strabismus.

The first of these patients was a female, ætat 30. Strabismus of twenty-seven years' standing. The tendon of the inner rectus of the left and squinting eye was divided, but followed by no change in its position. I then divided the same tendon of the right eye (assisted as before), and it instantly became *everted* and parallel with the *inverted left eye*. On being directed to look forwards, the eyes were straight and parallel, in short, *perfectly natural*.

The other patient was a girl, ætat 9. Strabismus of 6½ years' standing, complicated with severe psoropthalmia affecting both eyes, and nebula of the left cornea. The tendon of the adductor of the *left eye* was divided. It instantly became straight, but in a few seconds turned very slightly inwards. I then divided the tendon of the adductor of the sound eye, and the eyes instantly became parallel.

I visited both these patients to-day (a week after the first, and three days after the second operation), and am happy to say that the eyes continue quite parallel. I have not yet had an opportunity of dividing the tendons of the adductors of the sound eyes of the patients mentioned in the first part of these observations. I am, Sir, your obedient servant,

THOMAS ELLIOT, M.R.C.S.L.

23, English-street, Carlisle,
August 10, 1840.

CANCRUM ORIS.

NOTE FROM MR. CURLING.

To the Editor of THE LANCET.

SIR:—In the report of my evidence at a coroner's inquest, in a case of cancrum oris, contained in your Journal of last week, I find it s ated in reply to a question from a juror, that *I was inclined to think that the disease was contagious*. As such is not the opinion expressed, nor that which I entertain, I shall feel obliged by your noticing the error. I am, Sir, your obedient servant,

T. B. CURLING.

1, Mount-place, London Hospital,
Sept. 9, 1840.

*** The statement came from a correspondent, whose name was published with the communication.—ED. L.

THE LANCET.

London, Saturday, September 19, 1840.

A SELECT COMMITTEE in 1815 called the attention of the House of Commons to the following abuses in the management of houses kept for the reception of lunatics :—

1. Keepers of the houses receiving a much greater number of persons in them than the houses were calculated to hold; and the consequent want of accommodation for the patients, which greatly retarded recovery.

2. The insufficiency of the number of keepers, in proportion to the number of persons intrusted to their care, unavoidably leading to a proportionably greater degree of restraint than the patients would otherwise have required.

3. The union of patients who were outrageous, with those who were quiet and inoffensive.

4. The want of medical assistance, so applied to the malady for which the persons were confined.

5. The detention of persons whose minds did not require confinement.

6. The insufficiency of the certificates on which patients were received into madhouses.

7. The defective visitations in private madhouses.

The evidence taken before the Select Committee in 1827, left no doubt on the minds of the Committee, that all these evils still existed in 1827. The Committee, therefore, "repeated, adopted, and confirmed," the recommendations of the Committees of 1807 and 1815. Thirteen years have since elapsed, and what can be said now of the management of houses for the reception of lunatics? That probably the more flagrant and revolting abuses which were detected in 1827 would not be detected at the present day; but that all the essential defects, and the horrid results of the system, remain in full activity. But very few more patients are cured, and nearly as many are destroyed, or allowed to perish, by accumulation in crowded cells; by the insufficiency of keepers, and by the want of medical assistance.

The principal charges made in 1827 against Mr. WARBURTON and his establishment in Bethnal-green, were, that the house was excessively crowded; that the medical attendance was utterly insufficient; that no attempt was made to cure the patients; that the patients were not classified; that the diet was not regulated; that the number of keepers was insufficient; that the superintendents were cruel; that convalescent madmen were made to act as keepers; that the patients were chained in cribs from Saturday till Monday, with only one blanket in winter, and were then washed down with mops and cold water, in winter and summer; and that maggots were crawling in the straw on which they laid.

Mr. WARBURTON opened his defence in a letter to the Committee, by denying the truth of these charges, *seriatim;* and when they were brought home to him and to his house by irrefragable testimony, he contended that the instances adduced were exceptional, accidental, and no part of his system. He admitted that the house had, at times, been crowded with patients, and he concurred in the opinion that that was injurious; "but," he said, "the numbers have always "been fluctuating; and I can *assert, as an* "*indisputable fact*, that there has never been "any contagious disease whatever in the "asylum, *and that a more healthy establish-*"*ment cannot be proved to exist than this has* "*been ever since it has been under my care.*" This was the rock of Mr. WARBURTON's defence in 1827: I admit that the patients have been crowded; that solitary cases of abuse have occurred; that some patients have suffered from the system; but I assert, as an indisputable fact, that a more healthy establishment than the "*White House*" cannot be proved to exist. The Committee had no direct means of rebutting the assertion which Mr. WARBURTON designated

with so much effrontery as an "indisputable fact!"

The "health" of the establishment could, of course, only be established, by showing that the number of deaths was few, as compared with the number of patients; but to that Mr. WARBURTON did not choose to advert. He gave in a return, however, from which it appeared, that in the four years 1823-6, about 454 lunatics were admitted, and 260 discharged; leaving it to be inferred, that 194 lunatics died in the White House within that period, or more than 2 in 5 of the number treated.

It happens that we have possession of the Returns made by the proprietors of licensed houses themselves, showing the number of deaths, the numbers admitted, the number resident, and the numbers discharged during the last six years; and Returns from other asylums, where patients are differently treated. We have, therefore, data, which the Select Committee did not possess, for testing the assertion, that more healthy establishments than the licensed houses cannot be proved to exist.

It may be well to prove first the inhuman sacrifice of paupers' lives under the present system—by a comparison of the mortality of paupers, and the mortality of the higher classes of patients, in the same licensed houses. The number of paupers treated was 2737; of these, 1790 were discharged alive, and 947 dead! The number of *other* patients treated amounted to 2371, of whom 357 died,—unquestionably a high rate of mortality, but 47 per cent. less than that of the unhappy paupers. Of 100 paupers sent to the licensed houses 35 died there; of 100 patients in better circumstances—paid for by their friends, and not by the parishes—23 died. It will be imagined, perhaps, that the paupers remained longer under treatment, and that the term of residence will account for their greater mortality; but the reverse is the fact. The paupers were kept in the houses *a year and a half*, the other patients more than *two years*. The number of *paupers* constantly under treatment during the six years, was 763; and as the deaths during that time were 947, the annual rate of mortality was 21 per cent. Eight hundred and forty-eight was the average number of *other patients* constantly resident in the licensed houses; the deaths in the six years were 357, and the annual rate of mortality was, therefore, 11 per cent. The mortality of pauper lunatics was nearly *double the mortality of other patients*, who had the ordinary care, diet, room, and medical attendance, which private houses afford.

In the four largest houses where paupers were received, the annual rate of mortality was 18; in the remaining small houses, the mortality was 9 per cent. annually; and, what further deserves attention, the deaths of other patients in the large houses, exhibited a much higher rate of mortality than prevailed in the houses from which paupers were altogether excluded.

Colonel SYKES has not thought it expedient to publish the names of the proprietors of the respective houses; but the greater part of them have been published before, in Parliamentary Returns, and may be easily ascertained. At present we shall merely state, that the *annual* mortality in all the small houses was 9 per cent.; in the house No. XVIII, 16 per cent.; in the house (for females) No. XXXIII, 14 per cent.; in the house (for males) No. XXXII, 22 per cent.; in the house No. XXXV, 23 per cent.,—enormous differences, which it will be the duty of the parties to account for at a future day. The patients remained one year and three quarters in No. XXXV, and three years in No. XVIII. The cause of this difference should also be explained.

No use whatever has been made of these Returns; the deductions which flow from the facts have never been noticed, and neither the Commissioners nor the LORD CHANCELLOR, to whom the Annual Report is made, have ever, so far as the public is informed, acted upon the results, or taken the proper steps to put an end to the atrocious system under which so many pauper lunatics are destroyed, and so few are restored to reason. Indeed,

the paid Commissioners seem entirely ignorant of the very simple methods which we have employed to determine the comparative mortality of the different establishments; and, since the two first years, they have neglected to return the number of recoveries. That they were entirely unacquainted with these methods, and with the appalling facts which they disclose, is evident, not only from their negligence, but from the paper of Colonel SYKES, one of the *unpaid* Commissioners, who would necessarily have access to any documents which had been placed at the disposal of the Commission by the *paid* Commissioners, or their salaried secretary. The gallant Colonel states, that "the average "proportion of pauper deaths, of both sexes, "to the total number of pauper patients, is "12.76 per cent.,"—rather under 13 per cent. Upon turning to the tables, which exhibit the facts in detail, and which cannot be mistaken, we find that, in the seven years to which he refers, 2005 pauper lunatics were discharged (alive), and 1075 died; the mortality of the cases treated having been 35 per cent. in 1¼ years, the mean term of treatment. The mean number existing in the houses was nearly 763 during the seven years, equal to 5344 existing for 1 year; so that the *annual* mortality was 20 per cent., or 1 in 5, and not 12.75 per cent., or 1 in 8, as Col. SYKES and the other Commissioners imagine. The explanation of the error will be found in the table,* where it appears that he divided the deaths by the numbers *existing at the commencement of every year, added to the numbers discharged in the seven years*; thus making the *total pauper lunatics under treatment*, 8424: in fact, counting each lunatic two or three times; or, dividing by the 5344 already mentioned, and the 3080 added together, instead of the two numbers separately. Infinite thanks are due to Colonel SYKES for having published the documents which have been so long withheld; and we do not notice the error into which he has inadvertently fallen, for the mere sake of demonstrating the incompetency of the paid Commissioners, who ought to have made their calculations correctly, but to prove that the evil is of a greatly more aggravated description than would be supposed from the honorary Commissioner's statement. He appears to have shrunk from the fearful truth. The real mortality, no doubt, appeared to him incredible. It is no disparagement to Dr. J. BRIGHT, Dr. SOUTHEY, and their colleagues of the College, as practical physicians, to say that they are incompetent Commissioners, and absolutely ignorant of the method of determining the health of a fluctuating body of individuals, or the general results of treatment; and while this is the hypothesis that is the least discreditable to their character, it is probably the most correct.

It is fair to conclude, from the facts in the Returns, that the condition of lunatics has not been essentially improved, or has been improved very little, in the licensed houses, since the inquiry of the Select Committee of the House of Commons in 1827; we shall therefore give a very brief sketch of their treatment at that period, in order that the full force of the horrors implied by an annual mortality of 20 per cent. may be distinctly understood. When it is stated that the mortality is 20 per cent., instead of 7 per cent., this looks a very harmless statement upon paper; but what does the difference imply? Visit the York Retreat, the Gloucester Asylum, and the White House, or No. XXXV., and you will not be slow in discerning. Just as to perceive all the meaning of a difference between 70° and 20° of temperature. You must visit the tropics, or pass from the summer of this climate to the dreary, frozen, desolate regions of the north.

In August, 1826, Mr. JOHN HALL, a guardian and director of the poor of the parish of Marylebone, went with the Rev. Mr. BIRDWOOD to the *White House*, Bethnal-green. They desired to see the paupers of Marylebone then in the establishment; all were brought into the wards, excepting one

* "Quarterly Journal of Statistical Society of London," July, 1840, p. 150.

male pauper, who was slow in making his appearance. They became at last impatient; and walked up stairs to the infirmary, in spite of the keepers, where they discovered the pauper. He was very lame; and two persons were leading him down stairs. Mr. HALL and Mr. BIRDWOOD gained access to the infirmary, "and there" said the witness, "we found a considerable number of very "disgusting objects—a description of pauper, "I should conceive, chiefly idiots, in a very "small room: they were sitting on benches "round the room, and several of them were "chained to the wall. *The air of the room "was highly oppressive and offensive, so much "so that I could not draw my breath; I was "obliged to hold my breath while I stayed to "take a very short survey of the room.*"

Mr. GARRETT DILLON had, in the discharge of his duty as surgeon to St. Pancras, been in the habit of visiting the establishments of Bethnal-green. "The White House "(he said in his evidence) offers almost "every obstacle to recovery that can well "be conceived. The high and low are "allowed the same description of food; in "the day-time, persons labouring under "every form of insanity are in the same "room, and in the same yard; some of them "chained to seats, and some of them hand "cuffed; and there are some exceedingly "noisy, and others melancholy and dull,— "all in the same apartments, and in a yard "too small for such a number, where they "have not room for exercise or employ- "ment." Mr. DILLON attended the institution for two years before he saw the infirmary, "and then it was upon the occasion "of an old man, named RUTLOCK, who was "a schoolmaster in Kentish Town; he was "confined, and I wanted to see him. After "a good deal of hesitation I was allowed "to go into the infirmary; *it was a mere "place for dying.* * * * I have been obliged "to direct some of them to be put to bed, "*finding them in a dying state in the yard.* * * "*I do not consider there is any regular sys- "tem of medical treatment in that house.* "* * * I saw a man, named FERGUSON, a fortnight before his death, and "I observed to the superintendent that he "was feverish; that his diet should be "attended to; that he required to be looked "to by a medical man. I had not an opportunity of seeing him again till the day "before he died, that was Saturday the "28th of April, when I found him in the "yard, or in the room of the yard, which "is all open to the paupers, and the moment he saw me he complained that he "was dying; that his head was bursting "asunder; that the noise was killing him; "and I have reason to believe that there "was nothing done in that man's case from "the time that I saw him, about a fortnight "before his death, till that time; he died "the next day."*

We shall continue, at a future period, this sketch of the condition of lunatics in 1827. It will be said, we are well aware, that their treatment has been improved, and that the state of things described in 1827 no longer exists. It is precisely that point which we wish to see proved, and of which no tittle of evidence has been hitherto laid before the public. We only know that 35 in 100 of the pauper lunatics still perish in the licensed houses; and we do not know how many are cured.

COURT IN IRELAND FOR THE PROTECTION OF MURDERERS.

THEOLOGIANS who accredit the doctrine that the devil is at the bottom of all evil, by himself or his agents, will find no difficulty in ascribing his proper office and title to such a CORONER as—if the statements be correct—the one who presided at the following inquest, the particulars of which are contained in a letter, dated September 9, addressed by Dr. D. J. CORRIGAN, of Merrion-square, Dublin, to the ATTORNEY-GENERAL for IRELAND.

Dr. CORRIGAN publishes his statement as "another fact added to the many already

* Evidence before Select Committee, 1827, pp. 23, 24.

"recorded, in proof of the necessity of "altering that important branch of our "jurisprudence" which involves the Coroner's court; and he writes to the right hon. gentleman, Mr. PIGOT, apparently with the expectation that that excellent and able functionary can contrive to amend something that may be wrong in the law that suffers Coroners to become the abettors of crime:—

"I have ventured to address my observations to you. Your solicitude for the general good—your high station, and commanding abilities, make us naturally hope from you for the reformation of one of the most important branches of our jurisprudence; while, in your superior judgment, we have the best surety that whenever your attention can be turned to the subject, the sources of error will be removed, as far as this can be effected by human foresight."

On this subject we shall say a few words presently. The case which is here recorded is not unique, but A SAMPLE:—

"At an early hour on Monday, the 7th instant, when passing along Nassau-street, a man requested me to turn back to the house out of which he had come, as the housekeeper had, he said, hung herself. I followed him, and having gone into a back kitchen, I saw the unfortunate woman suspended by the neck from a beam which was not a foot above her head, while the soles of her feet were resting on the floor; a chair was in front of her, pressed close on her legs. The cord was fastened in a very peculiar way. The *middle* portion of the cord appeared to have been placed on the *back* of the neck, and *the two ends*, having been drawn forwards, to have been *crossed in front*, and then *brought up behind the ears* and tied *across the beam over her head*. The skin of the neck was deeply indented and excoriated where the cord lay; one of the ears was tumid, from œdema; the tongue was protruded; the face pale, not tumid; and the countenance expressive of great suffering. She was fully dressed, but her gown was untied. The explanation of the case given to me was, that she must have got upon the chair, and, having fastened the cord, then let herself off. But, in the death-struggle, it would have been, at least, likely that she would have kicked the chair away, or thrown it down; it lay close in on her legs. Again, the ceiling was so low that she could not have stood upright *on the chair* to fasten the cord. She might, then, have knelt on the chair; but this supposition equally failed. I bent the knees, and placed her kneeling on the chair, the body quite upright; *the cord round the neck remained as tight as before*. Indeed, the chair was so low, that when kneeling on it she was *not higher than before*. There remained, therefore, but one posture in which she could have placed herself when fastening on the cord,—the crouching posture, with her body bent, and leaning over the back of the chair. There was then, even in the appearance and situation of the body, enough to suggest the necessity of very minute and careful inquiry; but there were other circumstances. This woman had been last seen alive at nine o'clock on *Sunday* morning, when she had her breakfast in bed. She was all Sunday in the house shut up and alone. One of her companions, who had been with her in the morning of Sunday, stated, that one of them returned soon after and knocked at the door with her dinner, but received no answer; and returned again in the evening, and although there was *no answer* to repeated knockings at both times, *no inquiry was made to ascertain the cause*. The night is allowed to pass over, and on Monday morning she is hanging as I describe. There are still other circumstances to be noticed: the house next door is a waste house; the proprietor of the house in which this woman was shut up all Sunday is away from home for some weeks, and this woman is in the receipt of perquisites arising from the trade of the establishment. I feared to trust to my own observation for unravelling the truth, and having desired a person to give notice to the coroner, I called on Dr. Brady, the distinguished professor of medical jurisprudence to the Irish Law Institute, who has devoted his attention particularly to legal medicine; Dr. Brady visited the house, and drew my observation to many other circumstances which required consideration, but observed that a complete examination could only be made at the inquest.

"I called at the house again in the afternoon part of the day. The inquest had been held; it occupied about *half an hour*, and a verdict of *suicide* was returned. I could scarcely credit my senses when, on again entering the kitchen, I saw the body *exactly as I had left it* in *the morning*, STILL SUSPENDED; and in reply to my inquiry, I was informed that the body had not even been disturbed to examine the neck, to search for those signs which serve to indicate whether the cord might have been placed on the neck after death, or tightened by some other hand than her own. Even her clothes were not removed, to ascertain whether there might have been marks of external violence; and no search was made for internal injury, to ascertain whether poison might have been administered, or to determine other matters, of great importance, to which I need not now allude.

"What means were employed to throw light upon this dark transaction? Literally,

none; but a verdict was returned in less time, and with less trouble, than would be bestowed upon the death of a favourite dog or horse. This subject is not a matter on which the community at large can be indifferent. The want of accurate and searching examination in cases of this kind, holds out a strong inducement to the robber to become a murderer. He can give to murder such an appearance of suicide as will easily evade the flimsy pretext of a coroner's inquest, as at present conducted; and thus he is taught that his surest protection will be found in adding murder to theft."

We stated that this case was not unique, but merely A SAMPLE; and did so on the authority of the following statement, made by Dr. CORRIGAN to the ATTORNEY-GENERAL:—

"I believe you are fully aware that coroners' inquests—so important a department of our jurisprudence—are an absolute disgrace to the administration of justice. In my own profession (which is the most capable of forming an opinion on the subject) the whole mode of conducting inquiries at *coroners' inquests*, whether in cases of poisoning, suspected murder, infanticide, suicide, &c., is regarded as nothing better than *a gross burlesque on jurisprudence*. On this the voice of the profession is unanimous; and still this important department of our laws remains in a state that should not be tolerated in any nation or community that deems human life worthy of protection."

It is useless to declaim on facts so frightful as these. They are too alarming for vehemence of language, when a calm, firm, and severe course of conduct is necessary, either to convert such culprits into honester servants of the Crown, or banish them from the seats of justice which they pollute. Since all thorough reforms take their origin in the proceedings of some one individual, let Dr. CORRIGAN, as he seems earnest in his demand for a change in the present mode of conducting inquests in Ireland, examine thoroughly the *law* concerning Coroners, and, having ascertained—not what *new statute* should be passed, with the aid of the ATTORNEY-GENERAL, but what neglect of the existing law has been practised by the Coroner in this particular case, and make preparations for obtaining the removal of the alleged culprit from his office, that at least *one* example may be made, to stand as a terror to "gross burlesquers" of British jurisprudence. We shall be brief on this point. It is a matter for deeds, at present, not words. Let it be seen who has spirit and feeling enough to act by himself on this occasion, on behalf of the rest of the community.

Next, as regards the future. Is the Coroner for Dublin an attorney or a medical man? In all the kingdom there is not one individual who will seriously hazard a guess that he *is* a medical practitioner? Could any physician or surgeon living—would his habits, his impulses, his inclinations, his sense of the unquestionable duties of the office, suffer any surgeon or physician to let the corpse of a woman dangle from a beam, *he* like a dog on his haunches, *she* possibly self-strangled, more possibly basely murdered, and not release the body for examination, before sitting coolly down—not with a dozen ignorant beasts, but with twelve intelligent men, under and armed with the authority of the law, purposely to ascertain, *on view of the body, the* CAUSE OF DEATH?

But as long as, labouring under the influence of ancient custom and senile prejudice, the public are pinned to attorney candidates at elections for Coroners,—not *lawyers*, for the attorney candidates have not even the poor merit of being lawyers,—so long will the virtual monopoly be attended by the bad consequences of all monopolies of office,—ignorance of its duties, or neglect of their execution. Medical men should, *themselves*, everywhere open the field to another class of candidates,—to men who have been *educated in medicine*. If "law" be necessary in a Coroner, let the public be reminded that "law" is not of *one kind* only. The laws of physiology, for instance, in their study, educate the mind for the very business of all law.

The statute "law" of the Coroner's office would not fill two folio pages with its axioms. The training of the mind to act *for* the law, and to fulfil *all* its injunctions in the court of the Coroner, is not to be effected in the red-and-black-ink shops of scribbling and miserable-

minded attorneys; but in those high marts of natural law, the Temples of Medical Science. It is for the public good that medical candidates should offer at all vacancies for coronerships. Attorneys—experience has lamentably shown, and Ireland is specially studded with illustrations—are never pricked to the execution of their duties by the spur of public observation. Attorneys are elected coroners, and there they *sit*, untroubled, ungalled, unstimulated, unnoticed by the public; careless if unnoticed, insolent if reproached, afraid to be touched,—in point of fact, shrunk from as holders of the very whip which should be administered on their own backs.

And now, while Dr. CORRIGAN is at work in Dublin, armed with this case, let the freeholders of Cheshire read the present sample of attorney-inquests before going to the poll for the election of a Coroner in that county, who is to stand between them and the murderers who first execute their victims, and then write "SUICIDE" on the beam.

CLASSIFICATION OF ULCERS OF THE CORNEA.

To the Editor of THE LANCET.

SIR:—No division has hitherto been made of ulcers of the cornea, which embraces all the varieties of those affections as seen in nature,* and as such would tend much to the elucidation of the subject, and the adaptation of treatment to individual cases; I have endeavoured, however imperfectly, to supply the deficiency.

It has, I think, been rightly stated, that all forms of ulceration are dependent on inflammatory action; but the degree and form of the process, taken in consideration with the constitutional powers and peculiarities of the patient, constitute their main difference, and form the basis of treatment.

Ulcers of the cornea are met with of the following varieties:—

1. Acutely inflamed ulcer:
   with ceratocele,
   penetrating.
2. Circular, narrow, or crescentic ulcer.
3. Superficial, extensive, transparent do.
4. Small, shallow, transparent do.
5. Chronic, with opaque secretion.
6. Irritable ulcer.
7. Strumous ulcer.
8. Traumatic ulcer.
9. Sloughing ulcer.
10. Healthy ulcer.

On each of these several varieties I would make a few observations.

The acutely-inflamed ulcer is one of the most common forms, originating in the exciting causes of other forms of inflammation, and seen in connection with aquo-capsulitis, from blows, &c. The conjunctival and sclerotic vessels are more or less deeply injected, in proportion to the activity and violence of the accompanying inflammation, which is always severe; and frequently vessels are seen to run over the corneal edge to the superficies of the ulcer. The general and local symptoms are severe: the former consist of febrile disturbance; the latter symptoms are pain in the eye and over the brow, great intolerance of light, and profuse lachrymation. As regards the character of the ulcer, its edges are usually ragged and uneven; it extends rapidly, perforating the layers of the cornea, being more extensive superficially than deeply, in general decreasing in extent from above downwards; hence the ulcer is funnel-shaped. Its extension is attended with increase in all the symptoms until it reaches the membrane of the aqueous humour, when frequently its progress is stayed for a time or permanently, and in this stage the capsule is protruded forwards into the ulcer, constituting

Hernia Corneæ, or Ceratocele.—Here is a condition showing the existence of the capsule, which in its protruded state resembles a vesicle.

From this stage the ulcer may proceed or cicatrise; in which latter condition it constitutes healthy ulcer, which will be noticed subsequently. Frequently, however, the aqueous capsule is perforated, and the iris protrudes.

Perforating Ulcer.—When the cornea is perforated, the aqueous humour is evacuated, the anterior chamber, for the time, is more or less abolished, the iris falls against the inner surface of the cornea, and some part protrudes through the ulcer. In respect to prognosis, it is of material consequence what part of the iris protrudes, since frequently no adhesion, or displacement of the pupil, results, when the pupillary aperture is not engaged, and *vice versâ*.

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* The most practical division of ulcers of the cornea, as yet made by authors, is the following:—Mr. Tyrrell notices the chronic ulcer with opaque secretion, and then states that an ulcer must be in one of the following states—healthy, inflammatory, or indolent; finally, he makes the addition of the sloughing.—Vol. i., pp. 246, 250, 257.

Mr. Middlemore makes a division into "extensive superficial ulcer of the cornea," "circumscribed deep ulcer," "ulcer of the cornea with irregular and ragged edges," and "crescentic ulcer."

Circular, Narrow, or Crescentic Ulcer.—This form is frequently seen in connection with acute inflammation of the conjunctiva, especially in old, cachectic habits. The ulcer consists of a narrow line of ulceration, extending round the cornea to greater or less extent, near to its outer margin; it is deep and very narrow, its edges ragged and opaque, the opacity extending to some little distance on either side in the substance of the cornea. This variety of ulcer may extend completely round the cornea, and occasion the loss of vitality of that structure.

Superficial, Extensive, Transparent Ulcer.—This is attended with comparatively little suffering; there is but little vascularity or pain, and scarcely any intolerance of light. On examining the eye obliquely, the loss of surface becomes evident; it is usually somewhat irregular, but quite transparent. This form of ulcer is most common in young persons.

Small, Shallow, Transparent Ulcer.—The ulcer, instead of extending over a considerable surface, consists of a mere shallow, transparent, circumscribed excavation, frequently called a dimple; many of these heal without a renewal of substance, and without occasioning opacity; hence the shallow dimples or depressions on the cornea. They occur under the same circumstances, and are attended by the same symptoms, as the extensive transparent form.

Chronic Ulcer with Opaque Secretion.—Many authors have imagined that this form was dependent on the precipitation of lead on the surface of some ulcer existing on the cornea; but as it presents a peculiar set of symptoms, and may exist where no particle of any metallic collyrium has been employed, this is a very improbable explanation. We see it chiefly in adults; it is chronic in its character, without much active vascular action, presenting small, round, or oval patches, which may exist on any part of the corneal surface, extending very slowly, and, after attaining a certain size, remaining quite stationary, their surface being covered with a thick, opaque, whitish or buff-coloured secretion; a few enlarged trunks pass over the cornea to the edges of the ulcer. It resists treatment for a length of time, and invariably occasions a dense leucoma by cicatrisation. Mr. Tyrrell imagines the secretion to be calcareous.

Irritable Ulcer.—This is a small, ragged ulcer, without much opacity, and with little accompanying inflammation. It occurs in middle-aged individuals, where the health is much deranged. Its chief symptoms are great intolerance of light and severe pain, aggravated in paroxysms; the digestive organs are disturbed, and the nervous system irritable and readily excited.

Strumous Ulcer.—We may define this to be an ulcer produced by, and attended with, strumous inflammation. It is confined almost exclusively to children, and frequently follows the bursting of phlyctenulæ on the cornea; it presents a diversity of appearances at different stages, being active or slow, superficial or deep, accompanied usually with considerable vascularity: thus immediately after the bursting of the phlyctenula, it is a mere depression or transparent dimple; this may extend, forming a ragged, opaque, chronic ulcer, or with great activity quickly perforating the cornea, and causing prolapsus of the iris, or even the evacuation of the lens and part of the vitreous humour, followed by collapse of the tunics.

Traumatic Ulcer.—This simply refers to the producing cause, and not to the subsequent symptoms, which are modified by the constitution of the patient; but the most frequent form is the acutely-inflamed ulcer. The shape of the ulcer would here depend on that of the wound, and the nature of the producing body.

Sloughing Ulcer.—An ulcer in connection with sloughing of the cornea is seen in two different forms: first, where a slough produced by other causes is being separated by the process of ulceration; secondly, an ulcer specifically sloughing—one, namely, which is attended with the formation and detachment of mortified portions of cornea. The first variety scarcely needs any description; an ulcer forms, as in the detachment of sloughs in general, around its margin, gradually deepening until the dead are completely separated from the living parts; when this is accomplished, healthy action succeeds, and the ulcer cicatrises. The second is seen only in feeble, cachectic patients. Here small ulcers, unattended by much vascular action, make their appearance on the cornea; during their progress, whitish or ash-coloured sloughs, in thin layers, are thrown off, for a time rendering the ulcer clear and transparent.

Healthy Ulcer.—We may diagnosticate this variety by its appearance and symptoms; it is attended with no excess of vascularity; its edges are bluish-white; there is little or no pain; and healing, with diminution of the size of the cavity, proceeds gradually. It is seen in favourable cases of wounds of the cornea, after the separation of a slough, and in the favourable termination of inflammatory and other varieties of ulcers.

EDWARD HOCKEN.

Exeter, Sept. 9, 1840.

MALT IN DYSPEPSIA.

To the Editor of THE LANCET.

SIR:—Having used grains of the hordeum vulgare, after they have been malted, in some cases of dyspepsia, with a most beneficial effect, I shall feel obliged if you will make mention of it. I was first led to try them in the case of a gentleman troubled

with hæmorrhoids, who experienced great pain and inconvenience whenever the fæces were of too great consistence. Having tried the usual remedies, and obtained only temporary relief, he took daily a tablespoonful of the malt, with excellent effect. I apprehend it will be found a valuable remedy in cases of dyspepsia, where the vermicular action of the intestines is too slow, and the liver torpid, as is so apt to be the case with those engaged in sedentary employments. In one case of this nature, the patient has taken it for two years with great advantage, and is quite partial to the remedy, especially when fresh. I look upon this as of great importance, as it induces patients to take it with regularity. The properties of barley malt are so generally known, that I need scarcely say I consider it acts in these cases as a mechanical aperient, mixing with the food during digestion, and rendering it of a proper consistence. I am, Sir, your obedient servant,

R. L. Bean, M.R.C.S.

King's College Chambers, Strand.

MALFORMATIONS.

ABSENCE OF THE PLEURÆ.—ABSENCE OF A PORTION OF THE INTESTINES.

To the Editor of The Lancet.

Sir:—I shall be obliged by your insertion in The Lancet of the following case of absence of the pleuræ:—

This malformation was found in a girl, 13 years of age, who died, on the 8th of last July, of inflammation of the brain. As reports were abroad that she had been ill-used, and that the disease of which she died had been brought on by external violence, an inquest was held on the body. Mr. Kingston, of this town, and his assistant, Mr. Clark, had attended her in her illness, but as Mr. Kingston was then from home, I was requested by the coroner to undertake the post-mortem examination for him. Mr. Clark assisted me. After examining the head, the appearances in which satisfactorily proved the death of the deceased from natural causes, we opened the chest; the heart was in its natural position, and both it and the pericardium quite healthy; the latter contained rather more than the usual quantity of serous fluid.

On examining the lungs I could find no pleura; both lungs were universally, but not very firmly, attached to the interior of the chest and to the surface of the diaphragm and pericardium by a thin uniform layer of healthy cellular tissue; not the slightest trace of a serous membrane could be discovered. At first I very naturally thought that the adhesion was the result of inflammation, but, on closer examination, I soon found that that was not the case; there were no stringy fibrous attachments, and no contraction of the chest or lungs; the layer of cellular tissue was perfectly uniform throughout, both as to thickness and appearance, passing gradually into and becoming lost in the cellular tissue of the mediastinum. It had altogether a totally different appearance from adhesions, the consequence of inflammation.

The phrenic nerves were in their usual position, and the distribution of the other nerves and vessels appeared to be normal. There was slight pneumonia of one lung in the stage of red hepatisation, and there was also an enlarged bronchial gland behind the thymus converted into cheesy matter; it, however, was quite quiescent, and did not seem to have produced any irritation.

Mr. Clark agreed with me that there were no traces or remains of a pleura, and that no pleura could ever have existed. I inquired particularly of the girl's parents and friends, if she had ever suffered from pain in the side, inflammation of the chest, or anything of the kind, and was assured that she had not. It is rather a singular thing that a month or six weeks before, I had assisted Mr. Kingston in examining the body of an infant, the first child of an elder sister of this girl, that is, her niece, in which we found that a portion of the small intestines was wanting. The child died three days after birth; no meconium ever passed. There was frequent vomiting, and the abdomen was much distended; it was, externally, healthy, and well-formed, but, on opening the abdomen, we found that, just about where the *jejunum* is generally considered to pass into the ileum, the intestine ended in a large rounded *cul de sac*, nearly the size of the stomach; from this a very small fold of peritoneum passed off to the recommencement of the intestine, at the distance of two inches; the rest of the intestine, and the colon and rectum, were exceedingly small; there was no other malformation. Cases similar to the last, I believe, are not very uncommon, but I think there are very few, if any, cases of absence of the pleuræ on record. I am, Sir, your obedient servant,

John Coales, Jun.

St. Alban's, Sept. 12, 1840.

CHARING-CROSS HOSPITAL.

REMARKABLE ARREST OF DEVELOPMENT IN THE ORGANS OF GENERATION AND IN THE URINARY APPARATUS.

John Battle, aged 24, six feet in height, was admitted lately into the hospital, under the care of Dr. Chowne. He is a native of Clopton, in Suffolk. He was admitted under the name of "Elizabeth," having from his childhood worn a woman's dress, and being considered by his neighbours to be of that sex. On first looking at him, and before he spoke,

his features had the general characteristics of the softer sex. His hair was dressed like that of a female; he had extremely little beard or whiskers, the former not being sufficiently strong to leave any appearance after shaving, although the hair is dark. The hair is most scanty on the upper lip and chin, and less so below and behind the angles of the lower jaw. The pelvis at the highest and broadest part was thirty-seven inches in circumference, and was flat in proportion to its breadth. The right thigh and leg were rather smaller, weaker, and shorter than the left. The disparity in the length of the inferior extremities, together with his bending a little forward when he walked, to protect the lower part of the abdomen from the contact of his dress, gave him a peculiar and limping gait. The mammæ were flat and masculine; the papillæ small, with a few hairs around them. Surface of the thorax and abdomen free from hairs; voice decidedly masculine; general health good. He was not aware that there had been any malformation in his family. On the lower part of the abdomen, a little above the pubes, there was absence of the anterior wall of the belly, and of the anterior portion of the bladder, the posterior portion of which fell forwards into the opening, and was united by cicatrices to its margin everywhere, except at its lowest part. The surface of the protruded portion of the bladder had a circumference of about two inches; it presented the mucous membrane, highly vascular, of a bright red colour, and covered with the natural mucous secretion. At some parts the mucous membrane was absent over a small space; this, according to the account of the patient, occurred at different times at different parts, the places being afterwards again supplied with the red mucous covering; the whole of the exposed surface very tender to the touch. At the lower part of the surface of the bladder the ureters opened, their situations were obvious, although it was difficult to distinguish their exact orifices; on the left side there was a protuberance or fold of the bladder just over this part, so as to make the opening still more obscure. The openings were nearly horizontal to each other.

The urine constantly passed in small quantities from the ureters, but at times a quantity, equal to about a drachm from each ureter, would appear to have been retained, and forced out when any bodily exertion was made. The penis occupied its natural situation, and was capable of vascular turgescence as when fully formed, although in a minor degree. Including the glans it was about two inches in length, and never, at any time, exceeded three. There was no prepuce, except a small fold at the under part of the glans, where it existed in connection with a distinct frænum; the glans was quite exposed. There was no canal constituting an urethra, but a longitudinal depression on the upper side, giving the appearance of a groove; it was covered by a thin, pellucid membrane, and continued to the extremity of the glans. The organ at its termination, therefore, seemed bifid, and when the lateral portions were brought together, and made to meet above, the orifice at the extremity corresponded with that of the meatus. The upper surface of the part rested against the projecting portion of the bladder. Between the most posterior part of the organ and the lowest point of the projecting portion of bladder there was no union by cicatrix, as at the other parts, but the appearance of an undefined, rather deep opening. There was no prostate gland, urethra, or corpus spongiosum. As the urethra is naturally a continuation of the lining membrane of the bladder, and is the part on which the corpus spongiosum is formed, the abrupt termination or arrest of development of the bladder at the point corresponding with the pubes, explained the absence of those parts which essentially belonged to the urinary system, although subservient to another; while the corpora cavernosa and glans not essentially urinary, nor derived from the bladder, were present. The scrotum was naturally formed; the testicles were of dissimilar size, the right of the natural size, the left about half the natural size; both, together with the spermatic cords, were more than usually tender on pressure; on either side was a large inguinal hernia; the scrotum and inguinal regions were supplied with hair; it became scanty, however, on each side of the projecting bladder, and finally disappeared above the bladder, and in the line of the linea alba there was none. The anal extremity of the rectum was close to the scrotum, and where the perinæum in well-formed subjects commenced, leaving, therefore, in this case, no perinæum.

On either side of that which, in well-formed subjects, would be the pubis, a bony projection might be felt by the finger, at which point the bony structure of the anterior part of the pelvis terminated; the interspace was supplied by strong ligament; this was perceptible, both by external and internal examination. There was no vestige of an umbilicus. At one point of union, between the parietes of the abdomen and the protruding portion of the bladder, there was a cicatrix, but it did not at all resemble the navel, and there were other similar cicatrices all around at the points of union. This patient had lived to the present time subject to all the distressing inconveniences of occasional and painful contact of his dress with the protruded and delicate surface of the bladder, and to the misery of being in a constantly wet and sometimes an excoriated state.

He was seen in his native village by Mr.

Muriel, surgeon, of Wickham Market, who, considering that the case admitted of a diminution of some of the patient's distresses by the help of mechanism, for which London afforded greater facilities than the country, procured his admission into this hospital, and he was sent to town for the purpose. The instrument with which he is now provided, possesses the advantage of a shield, protecting him from the painful contact of his dress, and serves as a reservoir to receive the fluid, and to retain it until it may be convenient to him to allow it to be discharged.

In some clinical remarks on this case, Dr. Chowne observed, that although malformations of the class to which this belonged differed frequently in minute points, yet that a general similitude prevailed, not only as regarded the bladder and the parietes of the abdomen immediately concerned, but as regarded, also, other parts involved, whenever male cases were compared with each other on the one hand, or female cases on the other, but that such malformations occurred much more frequently in the male than in the female.

Although the patient, at present under consideration, had no malformation which could lead to the possibility of doubt as to his being a male, and although his own feelings were fully confirmatory of that fact, yet it could not be denied that his personal appearance, in some respects, had much of the female character, independently of the auxiliary influence of his mode of dress. This showed itself, however, chiefly in the face, the expression of which, generally, was not that of a man; the upper lip and chin were peculiarly deficient of male characteristics, in form, expression, and beard. He was also moved to tears upon slighter occasions than were usually seen to have that effect even in men suffering from illness and personal misfortune. The expression of his eye, however, sometimes in the course of conversation, formed a strong contrast with his other features, and his voice was strictly masculine. It was proper to take into consideration, moreover, that he had always associated with women; that with their apparel he had adopted their society and habits from his childhood upwards, and this might have had considerable influence on the physiognomy, not only when at rest but when in conversation. He was quick of comprehension, and intelligent for his sphere of life and secluded habits.

The peculiarity of his gait, although principally owing to the shortness of the inferior extremity of one side, and to the stooping position to prevent friction from his dress, was, without doubt, augmented by the absence of bony union at the symphisis pubis. First, the pelvis was necessarily less firm as a support for the upper structure. Secondly, it was thrown into what was an irksome, and would soon be a painful position, when resting with its superincumbent weight upon either femur. Thirdly, the absence of bony union occasioned greater breadth of pelvis, throwing the acetabula, and consequently the femora, further apart; all which circumstances conspired to make walking both difficult and peculiar, increasing in a greater degree the lateral movement, and decreasing the firmness. The colour of the protruded surface of the bladder was pretty similar at all times, namely, a bright red; this, however, varied in different cases, and had in others been described as red, either pale or lively, or dark and almost liver-coloured. In this instance it resembled in colour a portion of prolapsed rectum as frequently seen in children. The surface was rather uneven, in this also corresponding with what is most common; it was frequently described as wrinkled, granulated, or tuberculated, and as having the appearance of fungous or excoriated flesh. The texture had been described as spongy, membranous, vascular, pulpy, or parenchymatous, with glandular pores.

The extent to which the surface protruded, varied very considerably with the position, and according as there was straining from any cause. When the patient had been some time up, it had three times the volume which it presented when he had been some time reclining on his back.

Position made the same difference in the degree to which the herniæ protruded: when Battle was examined in the morning in bed, the herniæ were very much reduced, the inguinal regions and the scrotum appeared almost natural, and their contents might be accurately examined; but after he had been some time up the herniæ descended, the inguinal regions became full and very much distended, the scrotum drawn up and altered in its appearance, and the parts within scarcely, if at all, distinguishable. It was necessary in all cases to keep these facts in view, or the judgment and diagnosis might be very much embarrassed. It was stated by some writers on the subject, that in such patients the region of the pubis was particularly liable to accumulations of fat, especially in the lines of the spermatic cord giving the appearance of hernia. In almost all cases of malformation similar to Battle's, the description of the virile member corresponded with the appearances observed in his case; besides the outward general characters, the part had the appearance of being retracted; and this, to a certain extent, was the case, and was owing to the greater width of pelvis permitted by the ligamentous union of the ossa innominata at the pubis: the greater separation of these bones at the anterior part caused the origins of the corpora cavernosa to be at a greater distance from each other; in order to unite, therefore, they directed their course

more inward and less forward than common, and a larger portion of the structure was, consequently, retained within. The absence of bony structure and the substitution of ligamentous union was very general, if not constant, in this kind of malformation; it was the case in the young female patient, some time since in this hospital, admitted for a deformity of the same class. It was particularly necessary that this fact should be kept in mind, especially when the sufferer was in a sphere of life which might subject him, or her, to engage in manual occupation. It was obvious that such occupation should be of the lightest possible description, as other labour could not be performed without great increase of suffering, inevitable injury to the person, and most probably diminution of the period of existence.

We found in Battle's case that which might be regarded as the defect of formation most common in similar cases. At that point, immediately below the inferior margin of the exposed bladder, as already stated, there was not any cicatrix, but, instead, the appearance of a deep penetrating wound; within this, but very near the surface, the vasa deferentia terminated abruptly. This was found to be common in examples which had afforded opportunities of post-mortem examination. In the case under consideration, the characteristic secretion which at times passed from it, indicated the proximity and termination of these vessels. The anal extremity of the rectum in malformations of this character was very commonly, as in Battle's case, thrown unusually forward; but fortunately, he did not, as was very common, suffer any inconvenience of constipation, or otherwise, from it; and there was every reason to infer that the intestinal canal did not, as occasionally happened, participate in the defect of formation. In different instances the rectum had been found to be extremely narrow on the one hand, or extremely dilated on the other; or, together with other parts of the canal, altogether wanting.

A case was on record, in which it was stated that there was no colon, cæcum, or rectum; that the ileum terminated in a fleshy pouch, and that from this a narrow tube supplied the place of the rectum; it might perhaps, however, be suspected, that the fleshy pouch on the one hand, and the narrow tube on the other, were, in fact, rudiments of the cæcum and rectum, however imperfectly formed. The umbilicus, in this kind of malformation, was subject to greater variety than the other parts generally involved; yet its position observed a general rule, and was most commonly at the upper edge of the protruded bladder, the cicatrix being more or less blended with that of the bladder and abdomen. In some instances it occupied its natural position. In the case of Battle there was nothing that could be recognised as an umbilical cicatrix, that which was nearest to the umbilicus was flat, smooth, and glossy.

In examples where a similar state had existed, there had arisen a doubt whether there had ever been a vascular connection between the fœtus and the mother; but such suspicion could not now be encouraged.

In whatever degree there might be a deficiency of masculine character, it might, perhaps, be fairly accounted for, by taking into consideration the condition of those parts on which the physiological development of male peculiarities depended, with which might be included the spermatic cords. On the right side, the testicle, although of the normal size, was unusually tender to the touch; on the left side, it was not more than half the usual size, and was, also, morbidly sensitive. On both sides the spermatic vessels were tender under pressure, and obviously unfavourably placed; the adjacent parts being in a state of malformation and morbid excitement, partly from the immediate vicinity of the protruded bladder, partly from the irritation of effused urine, partly from the presence of large herniæ; and added to these, it was more than probable that some alteration in the anatomy of the abdominal ring, consequent upon the unusual structure of the pelvis, might conspire to embarrass the names of the spermatic cords in their functions, and the spermatic arteries and veins in them.

It appeared to be extremely probable that such a state of things existing from childhood, and being of a permanent character, might impair the healthy tone of the parts, and so weaken their physiological influence on the system.

Battle appeared never to have engaged in any other occupation than making a few straw hats for men, and he was from his corporal infirmities incapable of any but the slightest kind of employment, requiring little strength, little motion, little strain upon the body, and not long continement in any one position.

THE FEE FOR VACCINATION UNDER THE NEW ACT.

To the Editor of THE LANCET.

SIR:—I have much pleasure in communicating to you the unanimous determination, on the part of the surgeons resident in the town of St. Columb, to resist any attempt of the Poor-Law Commissioners or Guardians to reduce the fee for vaccination to the miserable pittance proposed in their recent circulars; and I am induced to give publicity to this arrangement, from the hope that similar laudable combinations will, in common justice and good faith, be made in every town in the United Kingdom. The

following is the form of tender which we have adopted:—

"*To the Board of Guardians of the St. Columb Union:*

"Gentlemen,—We, the undersigned, medical practitioners of St. Columb, tender our services (in accordance with the Act, for the purpose of extending the practice of vaccination) to attend the vaccination stations at the necessary periods; to vaccinate and certify in successful cases at 3s for each case. We beg leave also to suggest, that in case our tender be accepted, a division of this neighbourhood be made into at least four districts.

(Signed) "G. JEWEL,
"W. MOORMAN, jun.,
"T. D. MARTYN,
"J. H. NANKIVELL."

The following letter was then addressed to each of the other surgeons residing in different parts of the union:—

"St. Columb, Sept., 1840.

"Dear Sir,—As chairman at a meeting of medical practitioners held here this day, I beg to apprise you that we have come to a resolution to tender our services, in accordance with the Act for the extension of vaccination, at 3s for each successful case; and to say, that we feel confident that our medical neighbours will concur in our notions as to the amount of payment deserved by a liberal profession.

"Should this arrangement meet your views, you will oblige me by an early answer. I am, Sir, your obedient servant,

"G. JEWEL."

When this business is brought to a termination, I shall take the liberty of informing you of the event. I am, Sir, your obedient servant,

J. H. NANKIVELL.

St. Columb, Cornwall,
Sept. 11, 1840.

THE VACCINATION ACT IN CORNWALL.

To the Editor of THE LANCET.

SIR:—The different Boards of Guardians are now actively bestirring themselves, to carry into effect the new duties imposed on them, by that clause in the "Vaccination-Extension Bill" by which they are constituted, in addition to their other duties, into Boards of Health.

I have seen several of their advertisements, intimating that the Boards of Guardians will be ready on certain days to contract with medical gentlemen for vaccination; but the following one having particularly struck me, I beg to send you a transcript of it:—

(*From the "West Briton and Cornwall Advertiser," of Sept.* 11, 1840.)

"REDRUTH UNION.

"TO MEDICAL OFFICERS.—The Board of Guardians of this Union are desirous of receiving sealed tenders for the vaccination of *all children*, who are not *pauper children*, in the several parishes below named. The tender must state the price per head, pursuant to the Act 3 and 4 Victoria, cap. 29, entitled, &c.

"By order of the Board,
"WILLIAM DAVEY, Clerk.

"*Of all children who are not pauper children.*"

Was this exclusion *of all pauper children* from the benefits of the Act ever contemplated by the noble lord who introduced the measure; or by those honourable and noble gentlemen who supported it? God forbid! But does such a provision for exclusion exist in the Act itself? So far as I can understand the Bill, this exclusion does not exist, the word *poor*, or *pauper*, no where occurring in the Act.

As we have been treated by the gentlemen at Somerset House, and by their representatives throughout the country, in all their dealings with us, more as a body of commercial speculators, who are eager to catch at anything in the shape of money, than as gentlemen, members of an enlightened and honourable profession, I presume to offer to notice this Redruth advertisement, that your readers and myself may have the valuable advice which you can give us on the subject. There may be in England, in principle, many Redruths, and we must support one another, and the poor at the same time. I have the honour to be, Sir, your very humble servant,

A SURGEON.

Cornwall, Sept. 13, 1840.

*** This communication has been authenticated.

VARIETIES IN THE FORM AND POSITION OF THE LIVER.

Varieties in form occasionally occur, but they are more rare in the liver than in almost any other organ of the body. I have seen the left lobe so small, as to appear but a mere appendage to the right, being connected to it only by a thin and narrow isthmus. Cruveilhier records an instance in which the left lobe was attached to the right merely by a vascular pedicle about half an inch in length; the extremity of the lobe being adherent to the upper part of the spleen. Deep and narrow grooves are occasionally seen upon the convex surface of the right lobe running in an antero-posterior direction; they correspond with projecting fasciculi of the diaphragm, and occur generally in

women who have laced tightly. This surface is also marked frequently in females with deep channels, which are formed by the pressure of the ribs, and are also the result of tight lacing. The liver is sometimes constricted in the middle from this cause, and a dense fibrous band, produced by thickening of the fibrous capsule, extends around it like a belt. The lobes are occasionally divided by deep fissures into several additional lobes; the liver in this case presents a character which is normal amongst the lower animals. In a few instances the fossa for the gall-bladder has been found excavated so deeply, as to render the fundus of the sac apparent through an opening on the upper surface of the liver; a peculiarity which is also normal amongst some of the lower tribes of animals.

Varieties of position are more frequent than those of diversity of form. During utero-gestation the liver is usually pressed considerably above its ordinary plane, so as to impede more or less the action of the diaphragm, and produce embarrassed respiration. In an extremely fat subject, I once saw the diaphragm raised by the liver to a level with the fourth intercostal space, measured near to the sternum. In its natural position the thin margin of the liver scarcely reaches the border of the thorax; but in women who have laced tightly during youth, nothing is more common than to find this edge forced several inches below the base of the thorax, and altered in its form. In these cases the direction of the aspects of the organ are likewise changed; the convex surface looks directly forwards, instead of upwards and forwards, and lies in contact with the abdominal parietes. The concave surface is directed backwards, in place of downwards and backwards, and the posterior border is forced upwards. In a sketch from the subject, now before me, the greater part of the convex surface of the organ is in contact with the abdominal parietes, and the free margin extends into the umbilical and lumbar regions. In another sketch, as a result of the enormous magnitude of the stomach from the same cause, the liver is raised almost perpendicularly, the extremity of the left lobe being in contact with the diaphragm, and the right lobe in the right iliac fossa. A part of the liver has been found in the sac of inguinal and umbilical hernia. Various peculiar appearances are observed in the liver of the fœtus, arising from arrest of development. Thus, for instance, the entire organ, or a part of it, may be situated in the chest, or from absence of development of the abdominal parietes, the liver may form part of an exabdominal tumour, and be uncovered excepting by the membranes of the ovum. But the most interesting and unexplained form of altered position is that in which the whole of the viscera of the body are transposed, and the liver becomes placed on the left instead of the right side. These cases are generally perfect, and the peculiarity does not seem to interfere with the life or functions of the subject. The liver presents its natural form and size, and with the simple exception of left for right, precisely the same relations. The aorta, of course, occupies the right side, and the venæ cavæ the left, while the stomach is transferred to the right. Sir Astley Cooper has preserved the viscera of an adult who was the subject of this transposition. And a few years since I had the opportunity of examining a similar case in the body of Smithers, a man who was executed for committing arson accompanied with loss of life in Oxford-street. The viscera of this man were perfectly healthy, the liver finely formed, and the general fabric robust.—*Mr. Erasmus Wilson in the "Cyclopædia of Anatomy and Physiology."*

BREACH OF MEDICAL ETIQUETTE.

To the Editor of THE LANCET.

SIR:—Having been in attendance on a patient of the name of Joseph Walker, at Terriers, near Totteridge, in the parish of High Wycombe, who is a member of a Friendly Society (of which I am medical attendant), about ten days, who was suffering from a severe sloughing wound of the upper arm, the result of paronychia. To my great surprise, on visiting him on Thursday last, I found Mr. W. Rose, jun., with my patient; and, to my still greater surprise, I learnt that he had just removed a portion of slough from the arm, although he had been informed that I was in attendance, and that I was expected there shortly. Mr. R. apologised in an unsatisfactory way for interfering with the case, and excused himself on the plea that he had been requested by some ladies (to whom he is related by marriage) to see the patient, who is under obligations to the ladies alluded to. Now, the only shadow of an excuse for his interference was, that I had only seen the man on alternate days, the distance (six miles from my residence) and my other engagements preventing me from visiting him daily. On an interview with Mr. Rose, he appeared to be very anxious to take charge of the case, to which I objected, but said I should be happy to meet him, if it would be any satisfaction to his friends, to which he made no reply, and I trusted that he would not interfere any further with the case; but, to my utter astonishment, when I saw the patient on Sunday morning, I found that Mr. R. had been there on the Saturday after my visit, and had persuaded the patient to let him take the case out of my hands; and, on requesting the man to let me see the arm, he refused to do so. Now, I would ask you, Mr. Editor, if this is gentlemanly

or professional treatment from one medical man towards another, and if it is to be borne in the present state of the profession. I must beg leave to state, that Mr. Rose agreed *in toto* with the plan of treatment that had been adopted, and the patient was perfectly satisfied with my attention; but, on Sunday, his conduct towards me was very different, and I fear that some sinister influence had been used, as he is quite in the power of Mr. Rose's friends, and dependent on them for employment.

I shall feel obliged by your inserting this in the next number of your valuable Journal, and am, Sir, yours, very respectfully,

J. HUTCHINSON, Surgeon.

Beaconsfield, Sept. 15, 1840.

LETTER FROM ST. GEORGE'S IN THE EAST.

To the Editor of THE LANCET.

SIR:—In the report of the inquest on the body of the child, Clark, published in the 24th No. of your valuable Periodical, there appears a letter, written by Mr. Cory, surgeon, of St. George's in the East, to the mother of the deceased, in which, with no little vanity and presumption, he has asserted, that "he attends *all the most respectable families of the neighbourhood.*" Now, as such a sweeping statement is calculated, I consider, to produce a very unfavourable impression on the public mind, with respect to myself and many other practitioners residing in this densely-populated district,* or, at least, to place us in a very unenviable light, perhaps you will have the goodness to permit me, through the medium of your columns, to offer a few remarks in reply thereto. I would observe, then, that the respectable practice of the district in question is by no means monopolised by Mr. Cory, or any other single individual. On the contrary, I hesitate not to affirm, that the share of such practice enjoyed by him is * * * * *, his professional labours being, it is well known, directed * * * to attendance upon the poor women of the neighbourhood, who, upon payment of 10s 6d, are admitted members of a *nominal* charity, which he has been pleased to designate the "East London Lying in Institution." I say a *nominal* charity, because, independently of its *name*, the establishment of which I speak possesses no existence—is, in truth, a *perfect nonentity*. I have the honour to remain, Sir, your most obedient servant,

A MEDICAL PRACTITIONER OF ST. GEORGE'S IN THE EAST.

* Our correspondent errs, the letter in question was only calculated to produce an "unfavourable impression on the public mind" with respect to the author of that communication.

PINE-STREET SCHOOL, MANCHESTER, PRIZE MEDALS.

To the Editor of THE LANCET.

SIR:—Will you have the kindness to insert the following few lines at your very earliest convenience:—I perceive that your remarks on my letter, bearing the signature "FIAT JUSTITIA," in reference to the distribution of the medals at the Pine-street School of Medicine and Surgery, Manchester, have called forth replies from Mr. Turner and Mr. Hall. The former gentleman's answer is candid in the extreme, and cannot fail in giving perfect satisfaction to those students who are similarly circumstanced with myself. Mr. Hall has fallen into an error, by stating that the reason why three successful competitors have not received their medals in due time is, their neglecting to apply in the proper quarter, and leaving Manchester without making known their place of abode: for my own part, I can assert, without fear of contradiction, that frequent applications have been made, and the answer invariably returned was, that the medals would be got ready as soon as possible. Three medals, at the present time, are now owing me: one for surgery; one for midwifery, session 1837-38; and one for practice of physic, session 1838-39. I am, Sir, your obedient servant,

ALDCROFT WALLER.

London, Aug. 31, 1840.

SUSPENSION OF LIFE.

"BUT it is not during their embryo state merely, that the vital actions of living beings may be suspended by the deficiency of external stimuli, and yet their vitality be preserved. Both the vegetable and animal kingdoms afford numerous examples of such an occurrence at all periods of existence, especially among their lower tribes. Mosses, for instance, often appear completely desiccated in dry weather, and seem as if dead; whilst, on the application of moisture, they revive in all their pristine beauty. The curious Lycopodium of Peru exhibits this torpor in a still more remarkable manner. When desiccated by drought, it folds in its leaves and contracts its roots so as to form a ball, which, apparently quite devoid of animation, is driven hither and thither by the wind; as soon, however, as it reaches a moist situation, it sends down its roots into the soil, and unfolds to the atmosphere its leaves, which, from a dingy brown, speedily change to the bright green of active vegetation. The Rose of Jericho is the subject of similar transformations. Instances exactly parallel are furnished by the animal kingdom. The common Wheel-Animalcule is one of the most remarkable, being capa-

ble of desiccation so complete as to splinter if touched with the point of a needle, and still preserving its vitality so as to revive when moistened. In animals reduced to a state of torpidity by cold, some vital action usually continues; and such cases cannot, therefore, be adduced under the present head. But instances are by no means rare in which the whole body has been frozen, and vital action has of course been completely suspended, yet without the destruction of the power of renewing them under more favourable circumstances. Lister first noticed that he had found caterpillars so frozen, that when dropped into a glass they chinked like stones, but nevertheless revived; and this statement has been confirmed by Bonnet and others. The Papilio Brassicæ has been produced from a larva which had been exposed to a frost of 0° Fahr., and which had become a lump of ice. Fishes are occasionally found imbedded in the ice of Arctic seas; and some of these revive when thawed. This tenacity of life appears greater, however, in the species which are confined to shallow lakes or ponds, and which have not the power, therefore, of escaping from the effects of cold."—*Mr. Carpenter in the "Cyclopædia of Anatomy and Physiology."*

STUDENTS' NUMBER.

Our next will be the "Students' Number" of The Lancet; we have, therefore, to request that prospectuses and notices of lectures, hospitals, &c., may be forwarded to our office as early as possible.

BOOKS RECEIVED.

Cyclopædia of Anatomy and Physiology. Edited by Robert B. Todd, M.D., F.R.S. Part XX. Lac—Liv. Sherwood and Co. 1840.

The Retrospect of Practical Medicine and Surgery for the Year 1840. By W. Braithwaite. Vol. I. Simpkin and Co.

Observations on the Diseases incident to Pregnancy and Childbed. By Fleetwood Churchill, M.D. Dublin: Keene and Son. 1840. 8vo. pp. 463.

Surgical, Operative, and Mechanical Dentistry. By L. Charles de Loude. With Four Plates. Whittaker and Co., London. 8vo. pp. 194.

Retrospect of Practical Medicine and Surgery for the Year 1840; being an Analysis of the British and Foreign Medical Journals and Transactions, or a Selection of the latest Discoveries and most Practical Observations in the Practice of Medicine, Surgery, and the Collateral Sciences for the past Year, made chiefly with reference to the Treatment of Disease. By W. Braithwaite. Vol. I., No 1. January—July. London: Simpkin and Co. 1840. 12mo. pp. 209.

TO CORRESPONDENTS.

The report in the "Westmoreland Gazette" of the inquest at Kendal, in which a druggist was examined relative to the violent death of the deceased, does not present anything that is objectionable in the proceedings. It does not appear that the druggist treated the deceased medically, and he seems to have been a proper person to examine, as he was a witness both of the accident and the death. But he was not entitled to the fee under the Medical Witnesses' Act, and, we presume, did not receive one.

Without friendship or interest with any person whose interest or friendship is essential to obtain such a situation, *C. C.* has, of course, no chance of accomplishing his desire. Common sense must direct him first to obtain the essential, that the chance may be secured. There is no mechanical process for effecting this. He should make personal inquiries among the agents, and then prepare himself with testimonials of character and fitness.

The statement of *Mr. Philbrick* is *ex parte*; but the alleged facts, the custom in inspecting practices, the apparent absence of arrangement to the contrary, and the note of Mr. Bateman with reference to the "guest," indicate the propriety of Mr. P.'s refusal to pay other expenses than those of the tavern.

END OF VOL. II.—1839-40.

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On the Statistics of the Mortality and Disease in London, by Dr. George Gregory.

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Lecture 6.—OVARIAN DROPSY:—History of the case; post-mortem appearances; symptoms of ovarian dropsy; diagnostic characters; signs derived from percussion; rules respecting tapping; pressure of diseased ovarium on the rectum; remote effects of the disease; spontaneous rupture of the cyst; illustrative cases, 9—13.

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affected: medicines required; opium, belladonna, tonics, nourishment. Care required not to move about too early: hip-bath. Tuberculated uterus: fleshy tubercle of Hunter; character of the disease; varieties of uterine tubercle; symptoms and progress; effects upon neighbouring parts; hæmorrhage an occasional symptom. Danger of forming an erroneous diagnosis; ill effects of pressure; necessity for prompt measures. Treatment of uterine tubercle: in the early stages; may be stayed in its progress; illustrative cases. Tympanitis uteri, 117—121.

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